

Project Administration Manual

Project Number: 48424-002
Loan Number: L3416
8 November 2021

Republic of Kazakhstan: CAREC Corridors 1 and 6 Connector Road (Aktobe–Makat) Reconstruction Project

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Project Administration Manual Purpose and Process

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

The Ministry of Industry and Infrastructure Development (MIID) and the Committee of Roads (COR) are wholly responsible for the implementation of ADB financed projects, as agreed jointly between the borrower and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by MIID and COR of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

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

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

Abbreviations

ADB	=	Asian Development Bank
COR	=	Committee of Roads
EMP	=	environmental management plan
ICB	=	international competitive bidding
IEE	=	initial environmental examination
LARP	=	land acquisition and resettlement plan
MIID	=	Ministry of Industry and Infrastructure Development
PAM	=	project administration manual
QCBS	=	quality- and cost based selection
RRP	=	report and recommendation of the President to the Board
SPS	=	Safeguard Policy Statement
TOR	=	terms of reference

I. PROJECT DESCRIPTION

A. Rationale

1. Roads enable connectivity and mobility, which are essential conditions for economic growth and development. This is particularly relevant for Kazakhstan—the world's largest landlocked country with an upper middle-income resource-rich economy and a population density among the lowest, at about 6 people per square kilometer. Kazakhstan's main natural resources—hydrocarbon and mining (oil, gas, ferrous and non-ferrous metals)—are unevenly spread over the country and remain modestly tapped because of infrastructure constraints. Long distance travel results in significant travel time and cost. Accessing regional and foreign markets is thus burdensome. A World Bank study estimated that transport costs account for 8–11% of the final cost of goods—almost double the cost for most industrialized countries.¹ As such, the development of transport infrastructure, together with sector efficiency improvements, can play a catalytic role in sustainable social and economic development of the country. Continued public sector investments are needed to modernize the infrastructure base which is strongly correlated with economic diversification and higher growth.²

2. The Kazakhstan government has, since 2007, been upgrading its national transport system to better integrate Kazakhstan into the world economy. This includes the reconstruction of the 2,787 kilometers (km) Western Europe–Western China international transit corridor [also known as the Central Asia Regional Economic Cooperation (CAREC) corridors 1b and 6b] to improve its efficiency and effectiveness.³ The country is already capturing a significant volume of transit traffic through roads and railways.⁴ Strategically, Kazakhstan has large potential to link the fast growing markets of People's Republic of China (PRC) and East Asia with Russia and Western Europe by road and rail, and through ports along the Caspian Sea.

3. With oil prices tumbling since 2014 and lower external demand slowing down the economy, Kazakhstan responded with a new economic anti-crisis program. The President in his address to the Nation on 11 November 2014 announced Kazakhstan's Infrastructure Development State Program “Nurly Zhol” (IDSP) for 2015–2019. To create a favorable environment for business driven regional economic integration, among others, the IDSP prioritizes domestic transport linkages of strategic importance and regional impact and connect the capital Astana with other “urban agglomerations” and/or “second-tier cities” in the Eastern, Western, and Southern parts of the country.⁵ Accordingly, the government, aided by development partners, is accelerating the development of the Centre South (Astana–Almaty), Centre East (Astana–Ust'-Kamenogorsk) and Centre West (Astana–Aktau) corridors. The program will be implemented from 2016–2020. The overall IDSP is expected to generate a significant number of new jobs and incomes through public investments.

¹ The World Bank. 2012. *“Project Appraisal Document, East West Roads Project”*, Washington D.C.

² S. Straub and A. Terada-Hagiwara. 2010. *Infrastructure and Growth in Developing Asia*. ADB Economics Working Paper Series. No. 231. Manila: ADB.

³ The project costs about \$6.5 billion and is mainly co-financed by ADB, the European Bank for Reconstruction and Development, the Islamic Development Bank, the Japan International Cooperation Agency and the World Bank.

⁴ For instance, the total volume of goods in transit through Kazakhstan in 2012 was 17.8 million tons by roads and rails, income from which totaled more than \$1 billion. Nevertheless, revenues are still low, affecting cost recovery and reinvestment capabilities.

⁵ The Kazakhstan Program for Regional Development—a mechanism for predictive spatial development of Kazakhstan up to 2020—focuses on developing the centers of economic growth (“urban agglomerations” of Almaty and Astana and fourteen “second tier cities”) to improve the country's economic potential and the living conditions in regional Kazakhstan. An identified challenge for the program is the development of critical engineering infrastructure, including that required for connectivity within and between the regions, i.e. transport systems.

4. The existing Aktobe–Makat road is a two-lane republican road originally designed to category III/IV standard, and connects the CAREC corridors 1b and 6b, and the capitals and administrative centers of the oil and mineral-rich provinces of Aktobe and Atyrau, where approximately 1.7 million people live. As a result of neglected and ineffective maintenance over the years, most of the road has either lost pavement structure or is severely damaged to the extent that vehicles would rather divert off the road and travel on parallel dirt paths for more comfort and safety. This largely deters professional transport operations as well as private travel. Many passengers traveling between Aktobe and Atyrau have to use rail instead and much goods traffic is diverted to the northern Akotobe–Oral–Atyrau route, as the detour takes almost the same travel time despite an additional distance of 360 km. Poor road connectivity has also become a key social issue contributing to the growing income and wealth disparity between rural and urban areas.

5. The State Program for the Development and Integration of Transport Infrastructure to 2020 (Transport Strategy 2020), adopted by the Government on 13 January 2014, aims to form a modern transport system in Kazakhstan that (i) increases the flow of freight through the country by properly integrating and linking land, sea and air transport systems; (ii) provides connectivity between regional cities and towns; and (iii) allows the development of infrastructure centers within regions. The project also forms part of the Center West Corridor, which is a high government priority as emphasized in the NEP. The project is consistent with the ADB Country Partnership Strategy for Kazakhstan, 2012–2016⁶ and fits with ADB’s Midterm Review of Strategy 2020.⁷ It supports the CAREC Transport and Trade Facilitation Strategy 2020⁸ and is included in the Country Operations Business Plan for Kazakhstan, 2016–2018.⁹

B. Impact and Outcome

6. The impact is aligned with a modernized transport system with increased freight transit, improved network connectivity, and creation of infrastructure centers, as highlighted in the Transport Strategy 2020. The outcome will be improved network operational performance, increased transit potential, and improved social and economic development of the western region of Kazakhstan in particular.

C. Outputs

7. The project outputs will be: (i) reconstruction of approximately 299 km of highway between Aktobe and Makat, and (ii) improvements to transport system operations with better provision of road traffic safety and logistics effectiveness.

⁶ ADB. 2012. *Country Partnership Strategy: Kazakhstan, 2012–2016*. Manila.

⁷ ADB. 2014. *Midterm Review of Strategy 2020: Meeting the Challenges of a Transforming Asia and Pacific*. Manila.

⁸ ADB. 2014. *CAREC Transport and Trade Facilitation Strategy 2020*. Manila.

⁹ The project is included in Asian Development Bank (ADB). 2015. *Country Operations Business Plan: Kazakhstan, 2016–2018*. Manila.

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

[illegible]

ADB = Asian Development Bank, COR = Committee of Roads, MIID = Ministry of Industry and Infrastructure Development, MOF = Ministry of Finance, MOJ = Ministry of Justice.

B. Overall Project Implementation Plan

[illegible]

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations – Roles and Responsibilities

1. Organizations

Project Stakeholders	Management Roles and Responsibilities
Ministry of Finance	<ul style="list-style-type: none"> • Sign and oversee the implementation of the Loan Agreement, and provide respective coordination and facilitation; • Allocate, release, and monitor the use of counterpart funds; • Endorse to ADB staff authorized to approve withdrawal applications processing; and • Request ADB to reallocate or cancel loan proceeds, if required.
Executing Agency (Ministry of Industry and Infrastructure Development)	<ul style="list-style-type: none"> • Oversee implementation and performance of the Project • Liaise with ADB; • Establish a team to manage the Project; and • Responsible for submission of the W/A to ADB, retention of supporting documents, and submission of any reporting requirements, including, the annual report and financial statements.
Implementing Agency (Committee of Roads)	<ul style="list-style-type: none"> • Manage and implement the Project; • Resolve issues that would compromise results' quality, costs, or completion time of the Project; • prepare regular periodic progress reports, and project completion report, and timely submit to ADB; and • Ensure safeguard compliance, legal conformity, and sound financial management.
Local Governments of Aktobe and Atyrau Provinces	<ul style="list-style-type: none"> • provide all necessary support to COR and consultants during project implementation, particularly relating to public consultations, safety awareness campaign and social and environmental safeguards; • submit copies of project-related documents, as applicable, to COR for audit purposes.
ADB	<ul style="list-style-type: none"> • work with MIID/COR to recruit construction supervision and project management consultants; • assist MIID/COR in providing timely guidance at each stage of the project for smooth implementation; • review all the documents that require ADB approval; • conduct periodic loan review missions, a mid-term review, and a project completion mission; • monitor compliance of all loan covenants (social and environmental safeguards, financial, economic, and others); • timely process withdrawal applications and release eligible funds; • monitor the compliance of financial audit

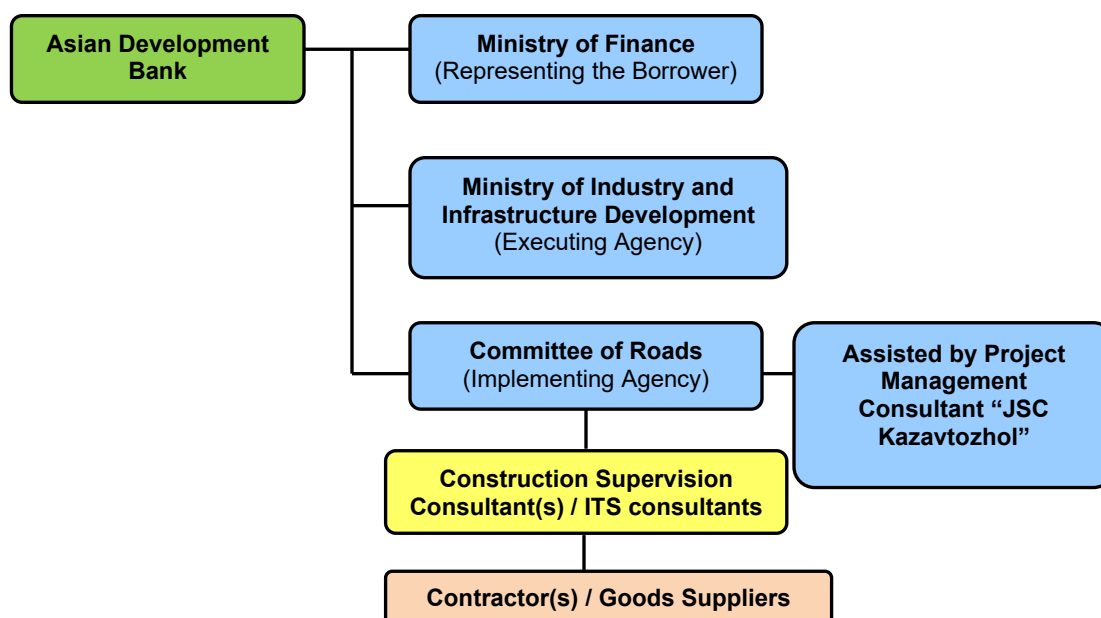
Project Stakeholders	Management Roles and Responsibilities
	<p>recommendations and evaluate implementation and performance of the project;</p> <ul style="list-style-type: none"> regularly update the project performance review reports with the assistance of MIID/COR; and regularly post on ADB website the updated project information documents for public disclosure, and also the safeguards documents as per disclosure provision of the ADB Safeguard Policy Statement (2009).

ADB = Asian Development Bank, COR = Committee of Roads; MIID = Ministry of Industry and Infrastructure Development.

B. Key Persons Involved in Implementation

Executing Agency	
Ministry of Industry and Infrastructure Development (MIID)	<p>Officer's Name: Mr. Beibut Atamkulov Position: Minister Telephone: +7 7172 245707 Fax: +7 7172 290873 Office Address: 32/1 Kabanbay Batyr Avenue, 010000, Astana, Kazakhstan</p>
Implementation Agency	
Committee of Roads (COR)	<p>Officer's Name: Tolegen Abdullin Position: Chairman Telephone: + 7 7172 243383 Fax: +7 7172 299065 Email: Office Address: 32/1 Kabanbay Batyr Avenue, 010000, Astana, Kazakhstan</p>
ADB	
Transport and Communications Division Central and West Asia Department	<p>Staff Name: Hideaki Iwasaki Position: Director Telephone: +632 632 6765 Email address: hiwasaki@adb.org</p>
Mission Leader	<p>Staff Name: Johan Georget Position: Senior Transport Specialist Telephone: +63 2 8683 1702 Email address: jgeorget@adb.org</p>

C. Project Organization Structure



IV. COSTS AND FINANCING

8. The project is estimated to cost \$283 million (Table 1). The following key assumptions underpin the cost estimates and financing plan:

- (i) Exchange rate: KZT337.25 = \$1.00 (as of 5 July 2016).
- (ii) Price contingencies based on expected cumulative inflation over the implementation period are as follows:

Escalation Rates for Price Contingency Calculation

Item	2016	2017	2018	2019	2020	Average
Foreign rate of price inflation	1.50%	1.40%	1.50%	1.50%	1.50%	1.5%
Domestic rate of price inflation	12.60%	4.60%	7.00%	8.00%	8.00%	8.0%

Source: Asian Development Bank estimates.

- (iii) Interest during construction for the Asian Development Bank loan is computed using the 5-year forward London interbank offered rate, among others. Price contingencies include provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

Table IV.1: Project Investment Plan
(\$ million)

Item	Amount ^a
A. Base Cost^b	
1. Aktobe–Makat Road Upgrade (Km 156 to Km 500)	250.4
2. Improvement of Transport System Operation	4.7
Subtotal (A)	255.1
B. Contingencies^c	18.1
C. Financing Charges during Implementation^d	9.8
Total (A+B+C)	283.0

^a Includes taxes and duties of \$22.2 million to be financed from the government resources.

^b In June 2016 prices.

^c Physical contingencies computed at 5% for civil works, equipment and consulting services. Price contingencies computed at 1.4%–1.5% on foreign exchange costs and 4.6%–12.6% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges. Interest during construction for the Asian Development Bank (ADB) loan has been computed at the 5-year forward London interbank offered rate plus a spread of 0.5%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

Sources: Ministry of Industry and Infrastructure Development and Asian Development Bank estimates.

9. The financing plan for the project is in Table IV.2. IsDB will provide a collaborative cofinancing loan of \$273 million for the reconstruction and upgrading of the Aktobe–Makat road between Km 10 and Km 156. ADB does not provide any administration services for the IsDB financed section and each financing partner follow its own policies and procedures including on procurement and safeguards. However, both parties have agreed, through a minutes of meeting signed in November 2015, respective responsibilities in terms of coordination, exchange of information, and overall implementation of the respective portions of the Aktobe–Makat road.

Table IV.2 Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources	240.3	84.9
Government of Kazakhstan	42.7	15.1
Total	283.0	100.0

Sources: Ministry of Industry and Infrastructure Development and Asian Development Bank estimates.

A. Detailed Cost Estimates by Expenditure Category

A. Detailed Cost Estimate by Expenditure Category

	(KZT'000)			(USD '000)			% Total
	Foreign	Local	Total	Foreign	Local	Total	Base Cost
A. Investment Cost^a							
1 Land Acquisition	-	2.02	2.02	-	0.01	0.01	0.00%
2 Maintenance Equipment	917.32	109.88	1,027.20	2.72	0.33	3.05	1.20%
3 Transport Information System	1,005.01	602.69	1,607.70	2.98	1.79	4.77	1.87%
4 Civil Works	14,215.09	65,399.71	79,614.80	42.15	193.92	236.07	
5 Consulting Services	1,497.39	1,858.54	3,355.93	4.44	5.51	9.95	
6 Project Management	188.86	241.55	430.41	0.56	0.72	1.28	8.53%
Subtotal (A)	17,823.67	68,214.39	86,038.06	52.85	202.28	255.13	100.00%
Total Base Cost	17,823.67	68,214.39	86,038.06	52.85	202.28	255.13	100.00%
B. Contingencies^b							
1 Physical	795.91	3,374.99	4,170.90	2.36	10.01	12.37	4.85%
2 Price	6,299.09	18,438.11	24,737.20	2.30	3.39	5.69	2.23%
Subtotal (B)	7,095.00	21,813.10	28,908.10	4.66	13.40	18.06	7.08%
C. Financing Charges During Implementation^c							
1 Interest During Implementation and Commitment Charge	3,308.42	-	3,308.42	9.81	-	9.81	3.85%
Subtotal (C)	3,308.42	-	3,308.42	9.81	-	9.81	3.85%
Total Project Cost (A+B+C)	28,227.09	90,027.49	118,254.58	67.32	215.68	283.00	110.92%

^a In June 2016 price; includes taxes and duties of \$22.2 million to be financed from the government resources.

^b Physical contingencies computed at 5% for civil works, equipment and consulting services. Price contingencies computed at 1.4%–1.5% on foreign exchange costs and 4.6%–12.6% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^c Includes interest and commitment charges. Interest during construction for the Asian Development Bank (ADB) loan has been computed at the 5-year forward London interbank offered rate plus a spread of 0.5%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

B. Allocation and Withdrawal of Loan Proceeds

ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS			
CAREC Corridors 1 and 6 Connector Road (Aktobe–Makat) Reconstruction Project			
Number	Item	Total Amount Allocated for ADB Financing	Basis for Withdrawal from the Loan Account
		Category (\$)	
1	Civil Works and Goods (machinery and equipment)	218,330,000.00	100% of total expenditure claimed*
2	Consulting Services	13,430,000.00	100% of total expenditure claimed*
3	Unallocated	8,540,000.00	
	Total	240,300,000	

* Exclusive of value added taxes imposed within the territory of the Borrower.

C. Detailed Cost Estimates by Financier

	(\$ million)				
	ADB		Government		Total Cost
	% of Cost		% of Cost		
	Amount	Category	Amount	Category	Amount
A Investment Cost^a					
1 Land Acquisition	-	0%	0.01	100%	0.01
2 Maintenance Equipment	2.77	91%	0.28	9%	3.05
3 Transport Information System	4.35	91%	0.42	9%	4.77
4 Civil Works	215.56	91%	20.51	9%	236.07
5 Consulting Services	9.08	91%	0.87	9%	9.95
6 Project Management	-	0%	1.28	100%	1.28
Subtotal (A)	231.76	91%	23.37	9%	255.13
Total Base Cost	231.76	91%	23.37	9%	255.13
B. Contingencies^b	8.54	47%	9.52	53%	18.06
C. Financing Charges During Implementation^c	-	0%	9.81	100%	9.81
Total Project Cost (A+B+C)	240.30	84.9%	42.70	15.1%	283.00

^a In June 2016 price; includes taxes and duties of \$22.2 million to be financed from the government resources.

^b Physical contingencies computed at 5% for civil works, equipment and consulting services. Price contingencies computed at 1.4%–1.5% on foreign exchange costs and 4.6%–12.6% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^c Includes interest and commitment charges. Interest during construction for the Asian Development Bank (ADB) loan has been computed at the 5-year forward London interbank offered rate plus a spread of 0.5%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

D. Detailed Cost Estimates by Outputs/Components

	(\$ million)				
		Aktobe-Makat Road Upgrade (Km 156 to Km 500)		Improvement of Transport System Operation	
	Total Cost	Amount	% of Cost Category	Amount	% of Cost Category
A. Investment Cost^a					
1 Land Acquisition	0.01	0.01	0.0%	0.00	0.0%
2 Maintenance Equipment	3.05	3.05	1.2%	0.00	0.0%
3 Transport Information System	4.77	0.00	0.0%	4.77	1.9%
4 Civil Works	236.07	236.07	92.5%	0.00	0.0%
5 Consulting Services	9.95	9.95	3.9%	0.00	0.0%
6 Project Management	1.28	1.28	0.5%	0.00	0.0%
Subtotal (A)	255.13	250.36	98.1%	4.77	1.9%
Total Base Cost	255.13	250.36	98.1%	4.77	1.9%
B. Contingencies^b					
1 Physical	12.37	12.14	4.8%	0.23	4.8%
2 Price	5.69	5.58	2.2%	0.11	2.2%
Subtotal (B)	18.06	17.72	7.1%	0.34	7.1%
C. Financing Charges During Implementation^c					
1 Interest During Implementation and Commitment Charge	9.81	9.63	3.8%	0.18	3.8%
Subtotal (C)	9.81	9.63	3.8%	0.18	3.8%
Total Project Cost (A+B+C)	283.00	277.71	110.9%	5.29	110.9%

^a In June 2016 price; includes taxes and duties of \$22.2 million to be financed from the government resources.

^b Physical contingencies computed at 5% for civil works, equipment and consulting services. Price contingencies computed at 1.4%–1.5% on foreign exchange costs and 4.6%–12.6% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^c Includes interest and commitment charges. Interest during construction for the Asian Development Bank (ADB) loan has been computed at the 5-year forward London interbank offered rate plus a spread of 0.5%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

E. Detailed Cost Estimates by Year

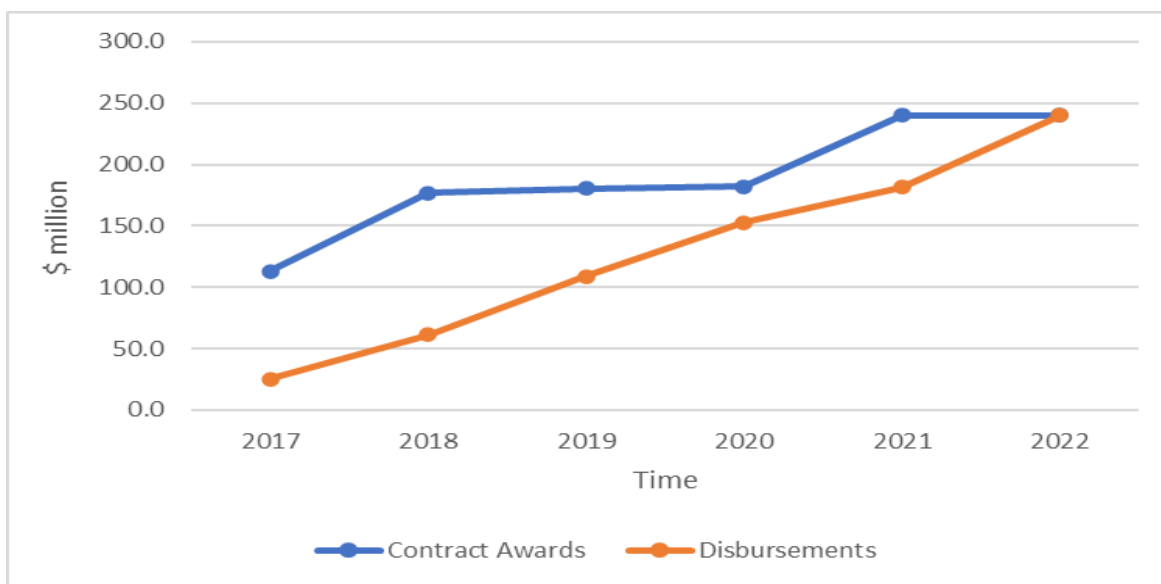
	(\$ million)					
	Total Cos	2016	2017	2018	2019	2020
A. Investment Cost^a						
1 Land Acquisition	0.01	-	0.010	-	-	-
2 Maintenance Equipment	3.05	-	0.61	-	2.14	0.31
3 Transport Information System	4.77	-	0.95	1.91	0.95	0.95
4 Civil Works	236.07	-	47.21	82.62	82.62	23.61
5 Consulting Services	9.95	-	2.99	2.99	2.99	1.00
6 Project Management	1.28	-	0.38	0.38	0.38	0.13
Subtotal (A)	255.13	-	52.16	87.90	89.08	25.99
Total Base Cost	255.13	-	52.16	87.90	89.08	25.99
B. Contingencies^b	18.06	-	8.43	2.41	5.42	1.81
C. Financing Charges During Implementation^c	9.81	-	4.58	1.31	2.94	0.98
Total Project Cost (A+B+C)	283.00	-	65.16	91.62	97.44	28.78

^a In June 2016 price; includes taxes and duties of \$22.2 million to be financed from the government resources.

^b Physical contingencies computed at 5% for civil works, equipment and consulting services. Price contingencies computed at 1.4%–1.5% on foreign exchange costs and 4.6%–12.6% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^c Includes interest and commitment charges. Interest during construction for the Asian Development Bank (ADB) loan has been computed at the 5-year forward London interbank offered rate plus a spread of 0.5%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

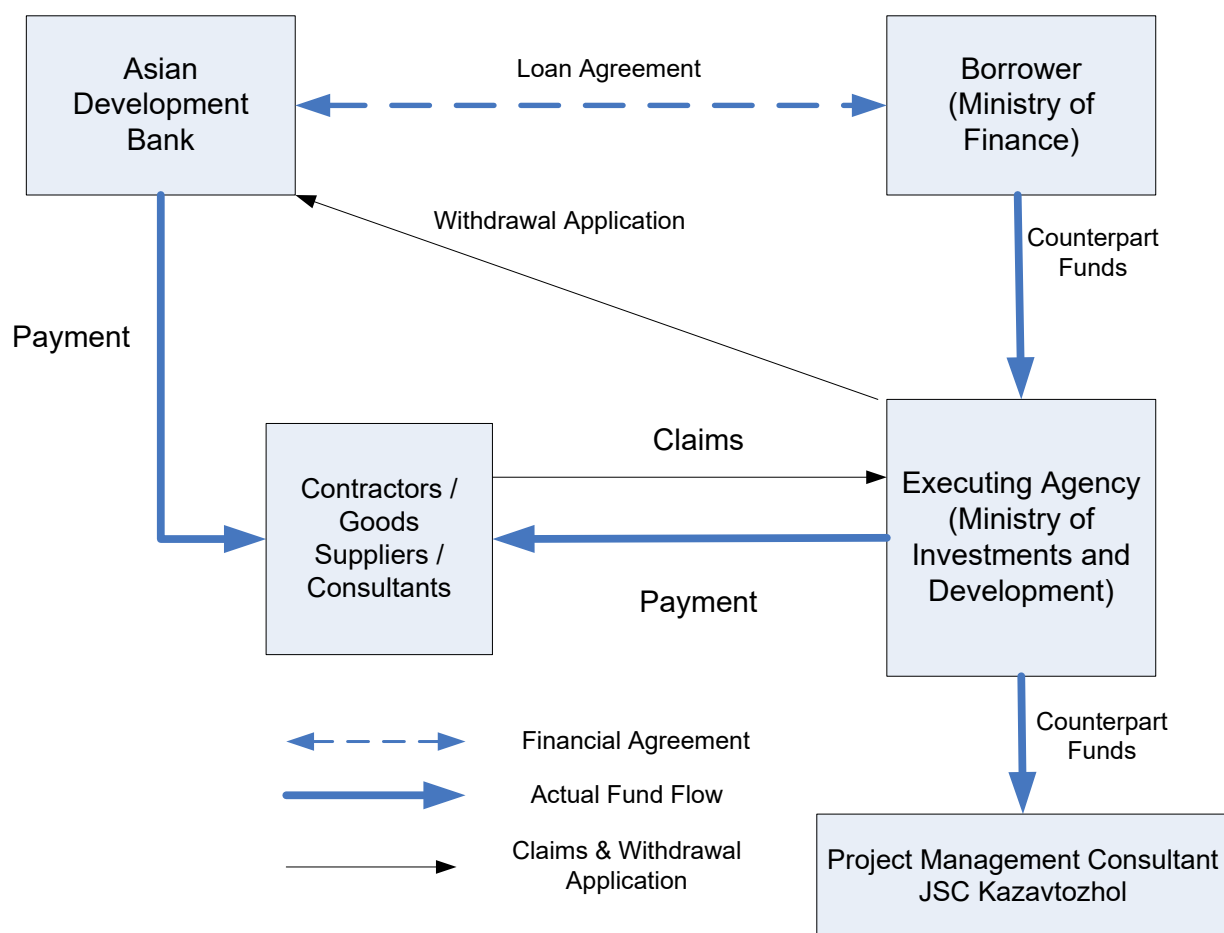
F. Contract and Disbursement S-curve



	Contract Awards (in USD million)				
	Q1	Q2	Q3	Q4	Total
2017	0.0	0.0	113.2	0.0	113.2
2018	0.0	0.0	63.6	0.0	63.6
2019	0.0	0.0	3.4	0.0	3.4
2020	1.7	0.0	0.0	0.0	1.7
2021	0.0	0.0	0.0	58.4	58.4
2022	0.0	0.0	0.0	0.0	0.0
	Total Contract Awards				240.3

	Disbursements (in USD million)				
	Q1	Q2	Q3	Q4	Total
2017	0.0	0.0	7.3	18.1	25.4
2018	0.0	5.0	18.8	12.1	35.9
2019	7.0	15.0	21.3	4.5	47.7
2020	9.9	9.8	9.7	14.5	43.9
2021	0.0	0.0	0.0	28.6	28.6
2022	30.0	28.8	0.0	0.0	58.8
	Total Disbursements				240.3

G. Fund Flow Diagram



V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

10. The financial management assessment (FMA) was conducted in July–September 2015 and subsequently updated as needed in accordance with ADB's Guidelines for the Financial Management and Analysis of Projects and Financial Due Diligence: a Methodology Note. The FMA considered the capacity of Committee for Road (COR) within the Ministry of Industry and Infrastructure Development (MIID), including funds-flow arrangements, staffing, accounting and financial reporting systems, financial information systems, and internal and external auditing arrangements.

11. Key financial management assessment findings are as follows:

Table 5.1: Summary of the Financial Management Assessment

Particulars	Conclusions
A. Funds Flow Arrangements	The MIID, through the COR, is currently implementing seven ADB-financed investment projects and has the knowledge and capability to manage fund flows effectively. In this case, the adoption of a system of direct payments from ADB to the main contractors and consultants further strengthens the fund flow arrangements, minimizing the potential for any mis-management or poor practices.
B. Staffing	The MIID's finance and accounting department has a team that has a good understanding of ADB procedures and includes all of the required skills. Given the working hours of the finance and accounting department staff, it would appear that additional trained staff may be required in order to meet all requirements.
C. Accounting Policies and Procedures	The COR's accounting procedures and systems are adequate, internal controls are suitably designed and effective (including the account reconciliation processes) and financial planning procedures are regular and thorough. The MIID and COR accounting policies and procedures are based on the Kazakhstan Government accounting standards.
D. Internal and External Audits	There is an internal audit unit at the MIID, which periodically reviews the accounts and procedures of the COR. There have been no major accountability issues brought out in audit reports over the past three years.
E. Reporting and Monitoring	All financial statements are prepared in a timely fashion and on a monthly, quarterly and annual basis. The COR has a fully computerized financial system, which is able to provide regular and ad hoc reports, showing progress against budget, financial and payment profiles and a range of performance indicators.

ADB = Asian Development Bank; COR = Committee of Roads; MIID = Ministry of Industry and Infrastructure Development.

12. **Risk Analysis:** This assessment concludes that overall project financial management pre-mitigation risk is Low. COR's accounting and finance staff are experienced with ADB-funded projects and adequately trained. COR has no major financial management deficiency. The unit's policies and procedures are adequate and in line with national and international legislation. The COR is capable of making timely payments as they become due, correctly recording all transactions and balances, supporting the preparation of regular and reliable financial statements and safeguarding its assets. This assessment proposes no significant measures to further strengthen the COR's financial management practices and capacity to manage the project.

Table 5.2: Risk Assessment and Mitigation Measures

Risk	Risk Assessment*	Risk–Mitigation Measures
<i>Inherent Risk</i>		
1. Country-specific Risks	M	IFIs have been working with the Government of Kazakhstan to strengthen procedures and capabilities within all relevant Ministries. ADB should ensure that these programs are fully assimilated into COR practices. MIID will ensure the timely release of counterpart funds, as per loan covenants.
2. Entity-specific Risks	L	Training of COR staff on ADB procedures will be carried out. ADB should ensure adequate staffing within MIID.
Overall Inherent Risk	M	
<i>Control Risk</i>		
1. Implementing Entity	L	ADB to ensure adequate staffing within COR's finance and accounting division.
2. Funds Flow	L	All disbursement will be made through either direct payment or reimbursement procedures to contractors and consultant.
3. Staffing	L	Dedicated and qualified accounting and financial management staff with extensive experience of ADB's procedures.
4. Accounting Policies and Procedures	L	Accounting Policy is in line with the national and international accounting standards and meets the requirements of ADB.
5. Internal Audit	L	MIID's internal auditor will include the project in the audit plan
6. External Audit	L	Audit of the project financial statements will be done in accordance with the International Standards on Auditing, by an independent auditor acceptable to ADB.
7. Reporting and Monitoring	L	COR will regularly report in accordance with ADB requirements on inherent adequate control mechanisms. Timeliness of such reports will be ensured through regular monitoring and follow-up actions by ADB.
Overall Control Risk	L	

* H – High, S – Substantial, M – Moderate, L – Low.

ADB = Asian Development Bank; COR = Committee of Roads; MIID = Ministry of Industry and Infrastructure Development.

Source: ADB estimate.

B. Disbursement

13. Online training for project staff on disbursement policies and procedures is available at http://wpqr4.adb.org/disbursement_elearning. Project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

14. The Loan proceeds will be disbursed in accordance with *ADB's Loan Disbursement Handbook (2015, as amended from time to time)*, and detailed arrangements agreed between the government and ADB.¹⁰ Payments for civil works, equipment and consultants will generally be made through direct payment, subject to the minimum withdrawal application amount. No imprest account will be established.

15. MIID through COR will be responsible for (i) preparing disbursement projections, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting supporting documents, and (iv) preparing and sending withdrawal applications to ADB.

¹⁰ Available at: http://www.adb.org/Documents/Handbooks/Loan_Disbursement/loan-disbursement-final.pdf.

16. Before the submission of the first withdrawal application, MOF shall submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is set in accordance with the Loan Disbursement Handbook. Individual payments below this amount should be paid by COR and subsequently claimed to ADB through reimbursement, unless otherwise accepted by ADB.

C. Accounting

17. The MIID will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project. The MIID will prepare consolidated project financial statements following cash basis and in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices.

D. Auditing and Public Disclosure

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

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

20. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

21. The Government, MIID and COR have been made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.¹¹ ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits

¹¹ ADB approach and procedures regarding delayed submission of audited project financial statements:

- When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (i) the audit documents are overdue; and (ii) if they are not received within the next six months, requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
- When audited project financial statements have not been received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (i) inform the executing agency of ADB's actions; and (ii) advise that the loan may be suspended if the audit documents are not received within the next six months.
- When audited project financial statements have not been received within 12 months after the due date, ADB may suspend the loan.

are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

22. Public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Public Communications Policy (2011).¹² The management letter, additional auditor's opinions, and the audited entity financial statements, if applicable, will not be disclosed. The audited project financial statements and the auditor's opinion on the audited project financial statements will be disclosed no later than 14 calendar days of ADB's confirmation of their acceptability.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

23. Advance contracting for civil works and consultants will be undertaken, to be financed by ADB under the Project. Advance contracting will follow ADB's Procurement Guidelines (2015, as amended from time to time)¹³ and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).¹⁴ ADB will approve the issuance of invitations to bid and advised MOF and MIID that this does not commit ADB to finance the Project. Advance contracting activities will include (i) preparation of tender documents, and (ii) evaluation of bids. The contracts will be awarded after loan effectiveness.

B. Procurement of Goods, Works, and Consulting Services

24. The project procurement classification is Category B. All procurement of works will follow ADB's Procurement Guidelines (2015, as amended from time to time) and the procurement plan to be developed for the project. Civil works contract over \$10 million, and goods contract over \$2 million will be procured through international competitive bidding (ICB) using ADB standard bidding document following pre-qualification and single-stage one-envelope procedure. ADB's prior review procedures will be followed. An 18-month procurement plan indicating threshold and review procedures, works, and consulting service contract packages is in Section C.

25. MIID agreed to include the relevant sections of ADB's Anticorruption Policy (1998) in all bidding and contractual documents. MIID will also (a) ensure that all Works contracts include a contractor's obligation to comply with road safety measures; and (b) monitor the accident rate and traffic volume during the operation of the Project Road.

26. All consultants will be recruited according to ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).¹⁵ The terms of reference for all consulting services are detailed in Section D. An estimated 1,180 person-months (87 for international, 1,093 for national) of consulting services are required for construct supervision. Consulting firms will be engaged using the quality- and cost-based selection (QCBS) method with a standard quality: cost ratio of 90:10. All the equipment procured under the consulting services contract shall follow ADB's Procurement Guidelines (2015, as amended from time to time).

¹² Available from <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>

¹³ Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>.

¹⁴ Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>.

¹⁵ Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/>.

C. Procurement Plan

Basic Data

Project Name: CAREC Corridors 1 and 6 Connector Road (Aktobe–Makat) Reconstruction Project	
Project Number: 48424-002	Approval Number: 3416
Country: Kazakhstan	Executing Agency: Ministry of Industry and Infrastructure Development formerly “Ministry of Investments and Development”
Project Procurement Classification: B	Implementing Agency: Committee of Roads
Procurement Risk: Moderate	
Project Financing Amount: \$556 million ADB Financing: \$240.3 million Cofinancing (ADB Administered): NA Non-ADB Financing: \$315.7 million	Project Closing Date: 31 December 2021
Date of First Procurement Plan: 26 August 2016	Date of this Procurement Plan: 23 August 2021, Version 6

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

1. Procurement and Consulting Methods and Thresholds

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

Procurement of Goods and Works		
Method	Threshold	Comments
International Competitive Bidding (ICB) for Works	\$10,000,000 and above	
International Competitive Bidding for Goods	\$2,000,000 and above	
Direct Contracting for Works	\$5,000,000 and above	

Consulting Services	
Method	Comments
Quality and Cost Based Selection (QCBS)	90:10

2. Goods and Works Contracts Estimated to Cost \$1 Million or More

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

Package Number	General Description	Estimated Value*	Procurement Method	Review [Prior]	Bidding Procedure	Advertisement Date (quarter/year)	Comments

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

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

Package Number	General Description	Estimated Value*	Recruitment Method	Review (Prior)	Advertisement Date (quarter/year)	Type of Proposal	Comments
CSP-4	Institutional Development of Intelligent Transport System	\$2.0 million	WCBS	Prior	Q2/2022	FRP	Assignment: International Quality-Cost Ratio: 90:10 Covid-19 Response? No

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

30. The following table groups smaller-value goods, works and consulting services contracts for which the activity is either ongoing or expected to commence within the next 18 months.

Goods and Works								
Package Number	General Description	Estimated Value	Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure ⁶	Advertisement Date (quarter/year)	Comments ⁷
None								

Consulting Services								
Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal ⁸	Comments ⁹
None								

B. Indicative List of Packages Required Under the Project

31. The following table provides an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Goods and Works							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure ⁶	Comments ⁷
None							
Consulting Services							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of	Recruitment Method	Review (Prior / Post)	Type of Proposal	Comments

			Contracts				
None							

C. List of Awarded and On-going, and Completed Contracts

32. The following tables list the awarded and on-going contracts and completed contracts.

1. Awarded and On-going Contracts

Goods and Works							
Package Number	General Description	Estimated Value	Awarded Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments
Civil Works	Km 160–504	223,000,000.00	159,390,887.87	ICB	Q4/2015	14-Jul-17	
Civil Works (re-bidding)	Km 330–458	112,596,740.00	73,749,645.47	ICB	Q1/2018	21-Jun-18	
ICB/EQPT /02-2017	Supply and Delivery of Equipment	2,800,000.00	3,064,306.67	ICB	Q2/2019	3-Jul-19	The awarded contract value reflected in this procurement plan is the equivalent of EUR2,758,400 as of 8 Aug 2019, inclusive of taxes and duties.
ADB/CW-2020	Dossor Bypass road section	5,640,208.67	5,640,208.67	DC	Q3/2020	21-Sep-20	The awarded contract value reflected in this procurement plan is the equivalent of KZT2,378,137,587.43 as of 21 Sep 2020, inclusive of VAT.
ADB/CW-2021-01	Lot 2 remaining works (1)	8,229,519.04	8,229,519.04	DC	Q3/2021	18-Aug-21	The awarded contract value reflected in this procurement plan is equivalent of KZT3,502,225,527.64 as of 18 Aug 2021, inclusive of VAT

ADB/CW-2021-02	Lot 2 remaining works (2)	4,929,993.25	4,929,993.25	DC	Q3/2021	18-Aug-21	The awarded contract value reflected in this procurement plan is equivalent of KZT2,098,050,702.10 as of 18 Aug 2021, inclusive of VAT
ADB/CW-2021-03	19 km Kandyagash–Makat road section	2,800,140.41	2,800,140.41	DC	Q3/2021	18-Aug-21	The awarded contract value reflected in this procurement plan is the equivalent of KZT1,191,652,048.73 as of 18 Aug 2021, inclusive of VAT

Consulting Services							
Package Number	General Description	Estimated Value	Awarded Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments
CSP-1	Construction Supervision Km 156–Km 330	4,500,000.00	4,649,641.92	QCBS	Q4/2015	5-Sep-17	contract signed on 6 Sep 2017
CSP-2	Construction Supervision Km 330–Km 500	4,800,000.00	4,851,123/20	QCBS	Q4/2015	5-Sep-17	contract signed on 6 Sep 2017
CSP-3	Development and Implementation of the Road Construction Executive Model	2,500,000.00	1,882,160.00	QCBS	Q2/2019	9-Jan-20	contract signed on 15 Jan 2020

2. Completed Contracts

Goods and Works								
Package Number	General Description	Estimated Value	Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Date of Completion	Comments
NA								

Consulting Services								
Package	General	Estimated	Contract	Recruitment	Advertisement	Date of	Date of	Comments

Number	Description	Value	Value	Method	Date (quarter/ year)	ADB Approval of Contract Award	Completion	
NA								

D. Non-ADB Financing

33. The following table lists goods, works and consulting services contracts over the life of the project, financed by non-ADB sources.

Goods and Works				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Comments
NA				

Consulting Services				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Comments
Project management consultant	\$1.1 million	1	Government procedure	

D. Consultant's Terms of Reference

34. The supervision consultants will consist of 87 person-months of international consultants and 1,093 person-months of national consultants. Consultant's terms of reference including for the construction supervision and the project management are in Attachment 1.

VII. SAFEGUARDS

A. Environment

35. The Committee of Roads (COR) of the Ministry of Investment and Development (MIID) shall ensure that the design, construction, operation and maintenance of roads to be financed under the project are carried out in accordance with Asian Development Bank's (ADB) Safeguard Policy Statement (SPS, 2009), the applicable laws and regulations in Kazakhstan, and the initial environmental examination (IEE) and its environmental management plan (EMP). COR shall ensure that potential adverse environmental impacts arising from the project are minimized by implementing all the mitigation and monitoring measures in the IEE. COR shall ensure that:

- (i) The EMP is to be updated based on surveys of the alignment once the detailed design is available and prior to the implementation of civil works;
- (ii) COR has sufficient resources to implement and record the implementation of the EMP;
- (iii) The contractor prepares and submits for approval to construction supervision consultants and COR a site-specific environmental management plan (SSEMP)

at least 10 days before taking possession of any work site. No access to the site will be allowed until the SSEMP is approved by the COR. The SSEMP will be tailored to the environmental impacts of the site and the specific project activities as planned by the contractor;

- (iv) The contractor is responsible for the day-to-day implementation of the SSEMP with COR and the project management consultant monitoring to confirm implementation;
- (v) COR, with the help of construction supervision consultants, will submit to ADB semi-annual environmental monitoring reports (EMRs) for the project within 1 month of the close of each half of the calendar year during project implementation, and the reports will include a review of the progress on environmental measures in the IEE and EMP, monitoring of such measures, problems encountered, and remedial measures taken. The EMRs will be prepared by the PMC until a PCR is issued;
- (vi) The detailed engineering design and civil works and other contracts for the project incorporate applicable environmental measures identified in the IEE and the EMP;
- (vii) The project Grievance Redress Mechanism (GRM) will be established by COR prior to construction and implemented, all environmental related complaints will be recorded in the complaints register on site and will be addressed through the procedures set up in the GRM;
- (viii) Should any change in scope take place the EA will inform ADB and a due diligence on environment will be carried out. Should any additional study be required it will be conducted, or the IEE updated as required by SPS 2009. If there are any unanticipated environmental impacts, they would be reviewed and a corrective action plan will be prepared by the contractor for implementation under the supervision of COR with assistance, as required by the supervision consultant.

B. Involuntary Resettlement

36. **Land Acquisition and Resettlement:** The project is classified as B for involuntary resettlement impacts. A draft LARP has been prepared and finalized based on preliminary information. As there is limited number of agricultural plots located along the project road, the impacts will not be significant. All the affected 17 land plots (with area of 557.09 ha) are owned by the State. Out of 17 state owned land plots, 11 plots (with estimated area of 152.04 ha) are leased by legal entities, including 13.80 ha provided for short-term lease (up to 5 years) and 138.24 ha provided for long-term lease (5 to 49 years). Total number of affected persons is estimated to be 11 (all legal entities - 10 peasant farms and 1 limited liability company). All of the 11 leased plots will be partially affected and do not have structures on the part of the land to be taken for the project purposes (the area of the land to be taken varies from 0.04% to 1.65% of the overall area of the respective plot). These plots are used as natural pastures and not for residential or commercial purposes.

37. The government through MIID shall ensure that new land acquisition is avoided as much as possible, resettlement impacts are minimized by restricting clearance of available ROW limits to the extent of clearly defined construction limits on each side of centerline of existing carriageway, resettlement and all other activities under the project are carried out in full compliance with all applicable laws and regulations of Kazakhstan, ADB's SPS (2009), and the

land acquisition and resettlement plan (LARP) prepared for the project. COR shall ensure that:

- (i) the LARP is finalized/updated based on design review and demarcation of construction limits on each side of center line of existing carriageway;
- (ii) finalized and updated, implementation ready LARP duly endorsed by COR are disclosed to displaced persons in their local language in accordance with the ADB's SPS (2009);
- (iii) the LARP updated and finalized following the final engineering design are submitted to ADB for review and clearance prior to award of any civil works contract;
- (iv) all land and rights of way required by the project shall be cleared and made available in a timely manner (in accordance with the schedule as agreed in the relevant civil works contract); and
- (v) the activities of the civil works contractor for the project road are following the approved LARP. and no physical displacement or economic displacement shall occur and no road section or part of a road section is handed over to the civil works contractor until: (a) the draft LARP is updated, finalized, and endorsed by ADB; (b) compensation at full replacement cost has been paid to all displaced persons in accordance with the updated and finalized LARP for relevant project components or sections that are ready to be constructed; (c) other entitlements listed in the updated and finalized LARP has been provided to displaced persons; and (d) LARP implementation report is submitted to ADB and determined as satisfactory.

38. Change to the scope, location or alignment of the project road shall be avoided and if during design review or implementation of the project, any such change to the scope, location or alignment of road is identified, shall not be made without prior approval of ADB. Any new LAR-related impacts as a result of final detail engineering design or changing in project scope, location or alignment will require a final LARP which should be submitted to ADB for its approval. The final LARP should be prepared following ADB's SPS and its required guidelines. No construction activities shall be commenced in the sections with new/additional LAR impacts before full implementation of ADB approved LARP is confirmed and cleared by ADB.

39. **Grievance Redress:** In addition, the COR, shall ensure (i) efficient grievance redress mechanisms are in place and functional prior starting LARP implementation and contractor's mobilization to assist affected persons resolve queries and complaints, if any, in a timely manner; (ii) all complaints are registered, investigated and resolved in a manner consistent with the provisions of Grievance Redress Mechanism as agreed in ADB approved LARP, (iii) the Complainants/aggrieved persons are kept informed about status of their grievances and remedies available to them; and (iv) adequate staff and resources are available for supervising and monitoring the implementation progress of the LARP.

40. **Information Disclosure:** Information sharing, and disclosure are tools to engage local communities and the projected affected population during project planning, development and implementation aimed to promote understanding about project activities and discuss way forward for fruitful solutions of developmental problems such as local needs, problems and prospects of resettlement. COR shall ensure the LARP and monitoring reports are disclosed by: (i) uploading the draft and ADB approved final LARP on MIID and ADB websites, (ii) placing hard copies of approved LARP in the offices of PMC Offices at Aktobe and Atyrau, and (iii) translating the executive summary of ADB approved resettlement plan, bearing information

on project impacts, asset valuation, entitlements, compensation budget and provisions with institutional arrangements in place and providing to the affected community.

41. Since consultations were carried out at preparatory stage of the project and draft LARP, however for continued information sharing, COR shall ensure that: (i) the Land Acquisition and Resettlement staff with support from Supervision Consultants conduct additional consultations during updating and implementation of the LARP; (ii) the displaced persons are informed about: (a) resettlement impacts, asset valuation, entitlements and compensation payment modalities with time lines, (b) Rehabilitation and income restoration measures suggested for the project displaced persons, and (c) grievance redress mechanism put in place with status of redress of grievances; and (iii) Liaison is maintained with affected persons and community, and consultation meetings are held regularly with surrounding communities and project displaced persons including women and vulnerable groups to share project related information during project implementation period.

42. **Monitoring and Evaluation:** LARP implementation shall be monitored internally by COR with support of Resettlement Specialists mobilized through Construction Supervision Consultant following monitoring parameters specified in the LARP. Land Acquisition and Resettlement staff in COR in collaboration with CSC and PMC will conduct regular internal supervision and monitoring of LARP implementation progress to ensure compliance with the provisions of the LARP. During LARP implementation phase, the monitoring results shall be consolidated into semiannual monitoring reports and shared with ADB for review, clearance and disclosure. Once LARP implementation is completed, bi-annual monitoring reports will be prepared and submitted to ADB for review and clearance. Upon clearance of monitoring reports by ADB, these will be disclosed by uploading on MIID and ADB websites. The overall responsibility to oversee LARP implementation and implementation of the IEE and EMP rests with COR. The COR will be supported by Resettlement Specialists mobilized through supervision consultants to carry-out its functions including RP finalization/updating, implementation and monitoring complained with ADB safeguard requirements.

43. Pursuant to ADB's Safeguard Policy Statement (2009) (SPS),¹⁶ ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the SPS. ADB will ensure that the project is in compliance with applicable national laws and regulations and will be bound by the prohibited investment activities list.

C. Indigenous Peoples

44. The project is screened as category C project for Indigenous peoples planning requirement under SPS 2009 and the COR shall ensure that sub-projects financed under the loan do not have any indigenous peoples' impacts within the meaning of the Safeguard Policy Statement (2009). And if during design review or implementation, any change to the scope, location or alignment of road with prior approval of ADB, causes to have any such impacts, COR shall take all steps required to ensure that the Project complies with the applicable laws and regulations of Kazakhstan and the ADB's Safeguard Policy Statement 2009.

VIII. GENDER AND SOCIAL DIMENSIONS

45. The proposed project is a general intervention. It does not specifically address poverty reduction through standard direct actions at the level of households or involve specific services

¹⁶ Available at: <http://www.adb.org/Documents/Policies/Safeguards/Safeguard-Policy-Statement-June2009.pdf>.

that deal with the geographical determinants of poverty. Nonetheless, the project will have a positive impact on alleviating poverty in the local communities along the project road. Reduction in travel times and cost will accrue to travelers. During construction, the project is expected to produce positive impacts in local employment. The key gender issues in the area are high unemployment for women in an area dominated by mining work, and restricted mobility due to poor road conditions. Gender sensitive road safety features will be included in designated parts of the project route, including lighting, roadside rest areas with separate male/female toilets, bus stops, and sidewalks. Advertisements for project related jobs will include a sentence to the effect that women are encouraged to apply.

46. Employment and business opportunities for local communities will be generated during execution of civil works. During implementation COR will incorporate provisions in bidding documents and civil work contracts that contractors shall (i) comply with Kazakhstan's applicable labor laws and related international core labor standards (i.e. the abolition of child labor, elimination of discrimination in respect of employment and occupation, the elimination of all forms of forced or compulsory labor, and freedom of association and the effective recognition of the right to collective bargaining); (ii) provide safe work conditions and separate sanitation facilities for male and female workers; (iii) provide equal wage to male and female workers for work of equal value; (iv) provide employment opportunities for women; and (v) carry out programs of preventing HIV/AIDS, illicit drugs and human trafficking prevention programs in workers' campsites together with awareness programs with workers. For these, effective linkage with existing active collaboration of civil society and government agencies in Aktobe and Atyrau needs to be developed. Furthermore, COR with the support of the construction supervision consultants and contractors shall conduct awareness raising campaign for public and workers about road safety, health safety and social issues, preventive measures on HIV/AIDS and sexually transmitted diseases, illicit drugs and human trafficking etc.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

A. Project Design and Monitoring Framework

DESIGN AND MONITORING FRAMEWORK

Impact the Project is Aligned with:			
A modernized transport system with increased freight transit, improved network connectivity, and creation of infrastructure centers (Transport Strategy 2020) ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
Outcome Improved network operational performance, increased transit potential and improved social and economic development of the western region of Kazakhstan in particular	By 2024 a. Average daily vehicle-km for the Aktoke–Makat–Artyrau road increased to 1,600,000 (2015 baseline: estimated 800,000 vehicle-km) b. Average travel time from Aktoke to Atyrau reduced to 7.0 hours, from 14.5 hours in 2015 c. Casualty crash rate per 100 million vehicle-km traveled maintained at no more than the existing casualty crash rate (2015 baseline: estimated 18.6)	a–c. Ministry of Industry and Infrastructure Development reports on annual traffic statistics and project performance monitoring system	Lack of funds to sustain project road maintenance
Outputs 1. 299 km highway between Aktoke and Makat reconstructed to category II standard and operational 2. Improved transport system operation with better provision of road traffic safety and logistics effectiveness	By 2023 1a. 299 km road section constructed to 120 km/hour design standard 1b. Road maintenance equipment procured and operational 2a. Transport information system strategy, architecture, and required regulatory frameworks developed and accepted by the executing agency 2b. Implementation plan for the establishment of a national transport information system approved by government agencies concerned	1a–1b. Consultant's progress reports, and project completion report from executing agency 2a–2c. Consultant's progress reports, and project completion report from executing agency	Cost overrun because prices of commodities and raw materials rise more than budgeted as a result of high volatile exchange rates or project design changes midcourse, e.g., to fund additional activities to accommodate local content. Cumbersome procedures for external loan approval and ratification cause project implementation delay.

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	2c. All targeted road agency staff trained on features of transport information system		
Key Activities with Milestones 1. 299 km highway between Aktobe and Makat reconstructed to category II standard and operational 1.1 Mobilize construction supervision consultant by 31 May 2017. 1.2 Award civil works contract by 30 June 2017. 1.3 Complete civil works by 31 December 2023. 1.4 Ensure that road maintenance equipment is fully operational by 31 December 2020. 2. Improved transport system operation with better provision of road traffic safety and logistics effectiveness 2.1 Mobilize transport information system consultant by 31 January 2020. 2.2 Government to accept consultant's reports and transport information system implementation plan by 30 June 2023. 2.3 Complete training of all road agency staff concerned by 31 March 2023.			
Inputs Asian Development Bank: \$240.3 million (ordinary capital resources) Government of Kazakhstan: \$42.7 million			
Assumptions for Partner Financing Islamic Development Bank will finance the upgrade of 153 km Aktobe–Makat section (Km 3–Km 156) in the amount of \$273 million under collaborative cofinancing with the Asian Development Bank project.			

km = kilometer.

^a Government of Kazakhstan, Ministry of Transport and Communications. 2014. *The State Program for the Development and Integration of Transport Infrastructure to 2020*. Astana.

Source: Asian Development Bank.

B. Monitoring

47. **Project performance monitoring:** ADB and the MIID/COR have agreed on a preliminary set of indicators to be monitored and for evaluating project performance. Representative indicators are included in the design and monitoring framework. The baseline data will be collected within 6 months of the date of loan effectiveness. At the beginning of project implementation, MIID/COR will confirm baseline values for social, environmental, and poverty reduction impact indicators. Monitoring indicators will be measured, with appropriate frequency, during implementation. Comments and findings regarding these project indicators will be incorporated in progress report to ADB. In addition to indicators for implementation monitoring, indicators for project evaluation will be measured at project completion, and 3 years after completion. Where relevant, indicators will be disaggregated by gender, participatory surveys will take place, and results will be compared with the baseline. A final report will evaluate changes in the preceding 3 years. MIID/COR has developed its monitoring capability for the ongoing projects and has the capacity to monitor the project. A consultant will assist in establishing the monitoring and evaluation system, and periodically updating project impacts on socioeconomic, gender, and environment.

48. **Compliance monitoring:** Compliance to the covenants will be jointly monitored by MIID/COR and ADB through monthly and semi-annual updates provided by the project management consultant and construction supervision consultant(s). The consultant will submit to ADB a status report on the covenants with the explanation and time-bound actions on partly or non-complied covenants. Apart from ADB project review missions 2–3 times a year, ADB's Kazakhstan resident mission will also hold quarterly country portfolio review meetings with MIID/COR to ensure the full compliance of the covenants.

49. **Safeguards monitoring:** Monitoring of the EMP implementation will be conducted through internal and external monitoring activities. A contractor will be responsible for internal monitoring of the EMP implementation (self-audit). Monitoring parameters and frequency of monitoring are defined in the EMP. Instrumental environmental monitoring of the project parameters such as air and water quality, and noise will be carried out either directly by the contractor or by outsourced accredited laboratory. The contractor ensures that calibrated or verified monitoring and measurement equipment is used. The contractor will prepare and send to the construction supervision consultant monthly environmental monitoring reports. External monitoring will be carried out by the construction supervision consultant based on field observations of environmental consultant, and the monitoring reports of the contractor. The construction supervision consultant will submit to Project Management Consultant (PMC) a semiannual environmental monitoring report (EMR) for verification and approval within 1 month after each reporting period. The EMRs will be prepared until the project completion report will be issued. The PMC will verify environmental monitoring reports and submit them to ADB for review through COR, and disclosure on the ADB's website. LARP implementation shall be monitored internally by COR with support of Resettlement Specialists mobilized through Construction Supervision Consultant following monitoring parameters specified in the LARP. Land Acquisition and Resettlement staff in COR in collaboration with CSC and PMC will conduct regular internal supervision and monitoring of LARP implementation progress to ensure compliance with the provisions of the LARP. During LARP implementation phase, the monitoring results shall be consolidated into Semiannual monitoring reports and shared with ADB for review, clearance and disclosure. Once LARP implementation is completed, bi-annual monitoring reports will be prepared and submitted to ADB for review and clearance.

50. **Gender and social dimensions monitoring:** A summary poverty reduction and social strategy has been prepared. MIID/COR, with the assistance of construction supervision consultants, shall ensure the project follows (i) measures to raise public awareness of the risks of HIV/AIDS and other sexually transmitted infections, drug and human trafficking; (ii) requirements for the civil works contractor(s) to take measures to protect construction workers from the risks of HIV/AIDS and other sexually transmitted infections, and for the testing and treatment of construction workers; (iii) awareness raising among temporary workers of important social and health issues; and (iv) measures to protect public and workers with requirements for the civil works contractor(s) to maintain their labor environment in healthy condition will be incorporated into the contract documents and are provided in the mitigation provisions of the EMP to meet requirements of ADB's Core Labor Standards (2006) and the country's relevant laws and regulations.

C. Evaluation

51. ADB will field an inception mission within 3 months after signing of the loan agreement. Review missions will be carried out every 4–6 months jointly by representatives of ADB, MIID/COR and/or the Borrower. The review missions will assess the status of the project implementation and site visits are also required, whenever possible. ADB and the government

will carry out a midterm review of project implementation around mid-2018. The review will focus on project impacts, particularly those relating to institutional, administrative, organizational, technical, environmental, and social aspects and poverty reduction. The project's economic viability, and other aspects that may have an impact on project performance, will be assessed. The review will examine the implementation progress of policy reforms and compliance with assurances specified in the loan agreement. This will allow for any necessary mid-course corrections to ensure successful implementation and the achievement of the project objectives.

D. Reporting

52. MIID/COR will provide ADB with (i) monthly progress reports in a format consistent with ADB's project performance reporting system; (ii) consolidated semi-annual project progress reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions, and (c) updated implementation plan for next 12 months; (iii) semi-annual safeguards monitoring reports separately for environment and resettlement; and (iv) a project completion report within 6 months of physical completion of the project. To ensure projects continue to be both viable and sustainable, project financial statements together with the associated auditors' report, would be adequately reviewed by MIID/COR and ADB.

E. Stakeholder Communication Strategy

Project Documents	Means of Communication	Responsible Party	Frequency	Audience(s)
Project data sheet	ADB's website	ADB	Initial project data sheet posted on the website no later than 2 weeks after approval of the concept paper; updated at least twice a year	General Public
Design and monitoring framework	ADB's website	ADB	Key information from the draft reflected in project data sheet; final version posted on the website at the same time it is circulated to the Board for approval, subject to the concurrence of the government	General Public
Initial Environmental Examination (IEE)	ADB's website	MIID/COR, ADB	Draft posted on the website by loan negotiations or earlier; and the updated or final version no later than 2 weeks of receipt by ADB	General Public, project-affected people
Resettlement Plan (RP)	ADB's website	MIID/COR, ADB	Draft posted on the website by loan negotiations or earlier; and the final/updated version no later than 2 weeks of receipt by ADB	General Public, project-affected people
Loan Agreement	ADB's website	ADB	Posted on the website no later than 2 weeks from	General Public

Project Documents	Means of Communication	Responsible Party	Frequency	Audience(s)
			their signing, after removing any information falling within exceptions at the time of the negotiations	
Report and Recommendation of the President (RRP)	ADB's website	ADB	Posted on the website at the same time it is circulated to the Board for approval, subject to the concurrence of the government	General Public
Summary of Poverty Reduction and Social Strategy	ADB's website Consultation	ADB MIID/COR	Posted on the website at the same time it is circulated to the Board for approval, subject to the concurrence of the government	General Public
Procurement requirements	ADB website for procurement notice (ACN/SPN), invitation for bids (IFB), Local newspaper advertisement	ADB MIID/COR	Available online (current and archive)	General public, potential civil works contracting firms
Project Administration Manual	ADB's website	ADB	Posted on the website at the same time it is circulated to the Board for approval, subject to the concurrence of the government	General Public
Environmental & Social Safeguard Monitoring Reports	ADB's website MIID/COR's website	ADB MIID/COR	Routinely disclosed, no specific requirements	General Public, project-affected people in particular
Audited project financial statements and the auditors' report	ADB's website	ADB	Within 30 days of receipt	General Public
Project Completion Report	ADB's website	ADB	Within 2 weeks of circulation to the Board for information	General Public
Evaluation Report	ADB's website	ADB	Within 2 weeks of circulation to Management and the Board	General Public

ADB=Asian Development Bank, ACN= advance contracting notice, COR = Committee of Roads, CSRN = consulting services recruitment notice, IFB = invitation for bids, MIID = Ministry of Industry and Infrastructure Development, RRP = Report and Recommendation of the President, SPN = specific procurement notice.

X. ANTICORRUPTION POLICY

53. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Project.¹⁷ All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all Project contractors, suppliers, consultants and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the Project.¹⁸

54. To support these efforts, relevant provisions are included in the loan agreement and the bidding documents for the Project. Further, MIID will establish eligibility criteria for persons serving on bid evaluation committees and require full disclosure of relevant interests and any potential conflict of interests. Additionally, MIID will engage private firms to conduct technical audits of randomly selected works contracts within 12 months of commencement of the contract and six months prior to MIID taking over the project site from the contractor.

XI. ACCOUNTABILITY MECHANISM

55. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make a good faith effort to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.¹⁹

XII. RECORD OF PAM CHANGES

PAM Version	Created Date	Revision Date	Reasons for Change	Main Contents of Change
V1.0	September 2015	NA	Initial	NA
		November 2015	Interdepartmental review	
V2.0		July 2016	Loan negotiations	
V3.0		December 2018	Change in EA name	Ministry of Investment and Development change to Ministry of Industry and Infrastructure Development
V3.0		September 2020	Update procurement plan	Procurement plan
V4.0		August 2021	Update procurement plan	Procurement plan
V5.0		November 2021	Loan closing date extension	DMF

¹⁷ Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>.

¹⁸ ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>.

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

ATTACHMENT 1**DRAFT TERMS OF REFERENCE****Draft Terms of Reference for Construction Supervision Consultant****A. Construction Supervision Consultant (CSC-1)****1. Background**

1. The CAREC Corridors 1 and 6 Connector Road (Aktobe–Makat) Reconstruction Project (the Project) is financed jointly by the Government of the Republic of Kazakhstan (the Government) through the Ministry of Industry and Infrastructure Development (MIID), and the Asian Development Bank. The objective of the Project is to reconstruct the 299 km of Aktobe–Makat road, which connects the capitals and administration centers of the Oblasts of Aktobe and Artyrau. This road is also a key connector of international corridors.

2. This investment program will result in enhanced regional cooperation and inclusive economic growth in Kazakhstan, particularly in the Oblasts of Atyrau and Aktobe, with substantially improved road connectivity and mobility between Aktobe and Artyrau. The project outputs will be (i) approximately 299 km of the road section between Aktobe and Makat reconstructed and upgraded to category II standard, and (ii) an implementation-ready blue-print for the introduction of ITS.

3. The Asian Development Bank finances this investment program which comprises physical investments for upgrading roads infrastructure and facilities, and nonphysical investments for institutional capacity development, which includes project preparation, project management and asset management, strengthening the safeguards implementation and road safety, and the introduction of ITS.

4. The physical investment include the road sections shown in the following table:

Table 1
Project Road Sections

Road Section	Length (Km)	Type of pavement	Technical Road Category
Aktobe Oblast			
Lot 1, Km 160 – Km 220	60	Asphalt concrete	Category II
Lot 2, Km 236 – Km 275	39	Asphalt concrete	Category II
Lot 3, Km 275 - Km 330	45	Asphalt concrete	Category II
Atyrau Oblast			
Lot 4, Km 330 - Km 370	40	Asphalt concrete	Category II
Lot 5, Km 370 - Km 418	48	Asphalt concrete	Category II
Lot 6, Km 418 - Km 458	40	Asphalt concrete	Category II
Lot 7, Km 487 - Km 504	17	Asphalt concrete	Category II

Note: Civil works procurement will follow ADB's international competitive bidding procedure.

2. Objectives of the Assignment

5. The Ministry of Industry and Infrastructure Development (MIID) will be the Client under the Contract for Services of the Construction Supervision Consultant (the Consultant). The Client requires a qualified international consulting firm to provide engineering and construction supervision services for civil works procured as Lots 1 to 3, and to assist the Executing Agency

with implementation of the project in Aktobe Oblast. The civil works will be executed under the contracts which incorporate Conditions of Contract of the International Federation of Consulting Engineers (FIDIC), MDB Harmonized Edition, June 2010. The main objectives of the Assignment of the Consultant are:

- (i) to ensure completion of the civil works within the scope, quality and time specified in the contract
- (ii) to perform the duties of the Engineer FIDIC
- (iii) to assist the Client in day-to-day execution of the project in Aktobe Oblast

3. Scope of Services, Tasks (Components) and Expected Deliverables

2.1 Scope of Services

6. The Construction Supervision Consultant will:

- (i) supervise and administrate all civil works contracts as the Engineer FIDIC ;
- (ii) ensure that all works comply with the approved engineering designs and technical specifications, agreed schedule and budget, terms and conditions of the contracts, standard engineering practice, and ADB's safeguards policies;
- (iii) issue instructions to contractors;
- (iv) monitor implementation of the land acquisition and resettlement (LARP);
- (v) supervise and monitor implementation of the Environmental Management Plan by contractors;
- (vi) ensure that the contractors provide adequate road safety measures throughout the road construction period and give design recommendations for improvement of road safety;
- (vii) make engineering decisions in consultation with the Client, Project Director and Project Management Consultant (PMC);
- (viii) advise the Client, Project Director and PMC on work progress, quality control, and implementation issues, if any;
- (ix) carryout at least quarterly inspection visits during the Defects Notification Periods;
- (x) during the Defect Liability Period, in compliance with the Legislation of the Republic of Kazakhstan, autumn and spring inspections of the road will be conducted each lasting two weeks. The Consultant shall be in attendance and is obliged to check results of these inspections and issue the decision whether there are defects to be remedied under the contract terms and provisions. The Consultant's presence during the inspection periods is mandatory; and
- (xi) undertake a final inspection of the Works, and after consulting with the Employer, and all other interested parties, and if satisfied, issue the Defects Liability Certificate at the end of the Defects Liability Period.

3.2 Specific Tasks

7. The main tasks the Consultant is required to perform under the contract are grouped and specified under the following headings.

3.2.1 Design Review

8. This task includes review of the detailed engineering design for its correctness and safety prior to the commencement of civil works. The Consultant is required to submit reports on his findings and conclusions and propose modifications or corrections to any defects or omissions.

3.2.2 Construction Supervision and Contract Administration

9. The Consultant is required to perform the following specific tasks necessary for effective and efficient supervision and administration of the civil works contracts:

- (i) Ensure that the construction methods proposed by the Contractor for carrying out the works are satisfactory.
- (ii) Inspect contractor's construction equipment; results of testing of material and soil, operations safety, property and personnel, and schedule of mitigation measures for adverse environmental impacts.
- (iii) Notify the Contractor to remedy works and materials that fail to comply with the specifications.
- (iv) Monitor and supervise (a) progress of contractors' works vis-à-vis contract schedule, and (b) quality of contractors' works vis-à-vis applicable technical specifications.
- (v) Check that "as built" drawing prepared by the contractors for all works during construction processes.
- (vi) Ensure that road safety design requirements are implemented in accordance with the contract specifications.
- (vii) Develop adequate quality assurance system and quality control plan for asphalt concrete pavement.
- (viii) Establish procedures to check contractor performance and timely submission of report on problems, including quality control reports, acceptance certificates, requests for variation or change orders, and contractor's claims and invoices.
- (ix) Evaluate any proposed changes (e.g., time, scope and cost) that may be submitted by the contractors.
- (x) Review and certify quantities of completed works, and process interim and final payments of the contractors.
- (xi) Issue interim payment certificates within the period specified in the contract
- (xii) Ensure that project financial management procedures are in place and are strictly followed, specifically relating to payments, financial accounting, requests for prolongation, and contractors' claims and invoices.

3.2.3 Safeguards Compliance Monitoring

10. The Consultant is required to carry out the following duties related to environmental mitigation²⁰ throughout the construction of civil works:

- (i) ensure that all the environmental mitigation measures required to be implemented are incorporated in the contract documents;
- (ii) supervise and monitor implementation of the contractors' environmental mitigation plans (EMP)

²⁰ With particular reference to the technical requirements of sound environmental standards on the basis of ADB's *Environmental Guidelines for Selected Infrastructure development Projects (Highways and Roads)* during construction.

- (iii) in case of unexpected environmental impacts, coordinate with the Client and PMC to recommend necessary mitigation measures to the Committee of Roads and ADB for implementation.
- (iv) monitor and report on the land acquisition and resettlement plan (LARP) implementation.
- (v) Monitor contractors' compliance with and performance of required actions regarding HIV/AIDS, human trafficking, and labor standards in accordance with the contract documents, such as awareness and education of workers and residents in the Project area.
- (vi) Ensure that the contractors do not employ child labor in the execution of the civil works contracts in accordance with the provisions of the contract.

3.2.4 Documentation and Reporting

11. The main documentation and reporting tasks of the Consultant are specified as follows:

- (i) Report on and update the works implementation schedule, highlight any unforeseen delays, and timely propose corrective measures.
- (ii) Undertake project performance monitoring and evaluation²¹ and reporting up to project completion.
- (iii) Collect baseline survey data based on the indicators in the detailed project and monitoring framework; and measure the indicators of overtime during the assignment period. Design a simple MS Excel or similar system for recording primary and periodic data.
- (iv) Prepare and submit all reports specified under this section of the Terms of Reference (the ToR), within the specified deadlines.

12. Develop and maintain a storage and retrieval system for documents containing information supplied by the field teams, decisions made at meetings, progress of civil works, certified achievements and milestones, financial reports, deviations from or changes to the contract plans (scope, cost, materials, time), correspondences, site diaries, test data and quality control reports, quantity survey records, as-built drawings, and progress reports.

3.2.5 Traffic management

13. The Consultant is required to take the actions in relation to traffic safety:

- (i) Prepare traffic management plans/ road safety plans;
- (ii) Keep records of accidents;
- (iii) Closely cooperate with road police in relation to traffic safety;
- (iv) Control the contractor to follow the traffic safety measures.

3.2.6 Additional Services

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

²¹ Following the project framework and ADB's *Project Performance Management System Handbook*.

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

3.3 Deliverables

16. All deliverables, such as reports, plans, manuals and other documents shall be prepared and delivered in English (4 copies) and Russian (4 copies). The schedule of deliverables the Consultant is required to submit to the Client is shown the following table.

Table 2
Schedule of Deliverables

Deliverable	Description/Scope	Due date of issue
Inception Report	The report shall include methodology, performance indicators with assumptions and risks, detailed work plan and timetable of the activities to be implemented, terms of reference specific to each individual activity, staffing and final terms of reference, supervision and monitoring procedure, and coordination arrangement among team members, contractors, Project Director, and PMC.	60 days after the Effective Date of the Contract for Consulting Services
Detailed Design Review Report for each Lot	Findings of the Consultant's review of the detailed designs, Specifications, Drawings and Bill of Quantities for all works and recommendations for making good any defects or omissions identified.	45 days after the Effective Date of the Contract for Consulting Services
Traffic Management and Road Safety Plans	A detailed report on the Traffic Management Plan submitted by the Contractor and approved by the Engineer	60 days after the Commencement Date for each Lot
Consultant's Construction Supervision and Contracts Administration Manual	The Manual shall provide detailed construction supervision and administration procedures to be applied to by the Consultant's staff throughout the construction and Defects Notification Period	90 days after the Effective Date
Monthly reports	Monthly Progress Reports must include the following information: (a) evaluation of the physical progress of civil works against the implementation schedule and output targets, (b) financial progress (c) quality assurance, (d) issues/problems with planned actions or actions undertaken to resolve the issues/problems. Each monthly report must include brief sections on environmental monitoring, and land acquisition resettlement	By the 7 th day of the following month

Deliverable	Description/Scope	Due date of issue
	report.	
Quarterly report	<p>The scope of Quarterly Progress Reports must include updated information on::</p> <ul style="list-style-type: none"> (i) project outputs, physical progress (ii) contractors' performance (iii) quality assurance (iv) financial progress (project cost and fund utilization and financial management) (v) safeguards (EMP and LAPR implementation and monitoring) (vi) status of VOs, (vii) list of progress and safeguards reports, (viii) updated information on monitoring traffic management/road safety plan (ix) list and status of IPCs 	15 days after the expiry of each quarter since the Effective Date of the Consultant's contract for consulting services until the completion of the Project.
Semi-annual environmental reports	Review of the implementation of EMP, performance of the monitoring system, summary of the main environmental issues, and options and recommendations for problem solving	Every 6 months after the Effective Date
Internal LARP compliance monitoring reports	Observations, findings, issues, non-compliance, and any variance from the provisions of the LARP, recommended actions necessary to ensure compliance with the terms of the approved LARP and ADB's Safeguard Policy Statement (2009).	Every 6 months after the Effective Date
Supplementary LARP	If newly affected people are identified during the project implementation, the Consultant will produce a Supplementary LARP in accordance with ADB Safeguard policies	If required
Project Performance Monitoring Reports	Collection and analysis of baseline data on social, economic, and project engineering aspects in the area affected by each road construction project/contract, with midterm updates and the final report. The reports are to be structured in accordance with standard ADB requirements for such reports.	First report, 60 days after the commencement of the consulting services. The due dates for mid term and final reports to be agreed with the Client.
Draft Project Completion Report	The content shall be in accordance with ADB format.	At 90% physical completion of the Project
Project Completion Report	The content shall be prepared in ADB format	60 days after the physical completion of the Project, or at a different date agreed with the Client.

17. Hard and electronic copies of all deliverables shall be delivered to the following persons/departments:

1. Committee for Roads, Mr. Ablaliev S.A.
Address: 32/1, Kabanbai str., Astana, Kazakhstan
Email: s.ablaliyev@mid.gov.kz
Fax number: + 7 7172
2. Project Management Consultant, Mr. ____
Address:

4. Team Composition & Qualification Requirements for the Key Experts

4.1 Team Composition

18. The Client will select an international firm in association with national consultants, to carry out the tasks in this TOR. The Consultant will be recruited in accordance with ADB Guidelines on the Use of Consultants (2013, as amended from time to time).

19. Consulting services require a total of **46** person-months of international experts and **516** person-months of national experts, and will take place over **57** months, including construction period 33 months with intermittent input of 6 months of relevant specialists during the Defects Notification Period 24 months.

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

Table 3
Consultant's Personnel Schedule

Consultant & Personnel Schedule							
Position		No.	Person-Month	Position		No. Person-Month	
Team Engineer	Leader/Resident	1	36	Deputy Resident Engineer/ Road Engineer			3102
				Materials/QA Engineer			399
Contracts Specialist		1	10	Quantity Surveyor			399
				Structural Engineer			130
				Land Surveyor			399
				Road Safety Engineer			133
				Civil Engineer			130
				Environmental Specialist			112
				Social Safeguards Specialist			112
Key Experts (International)		2	46	Key Experts (National)		17516	

* The construction period is 33 months; Team Leader and one Deputy Resident Engineer have three additional months for monitoring during the Defect Notification Period

21. In addition to the Key International and National Experts listed in Table 3, the CSC shall also provide sufficient number of properly qualified Non-Key Experts necessary for day-to-day supervision and quality control of the works on site, including Site Inspectors/Supervisors and Laboratory Assistants.

22. Further, the Consultant is required to provide supporting staff, including an office manager, sufficient number of translators/interpreters and other staff and services that the Consultant will need to establish and maintain effective administrative, management and logistics support to his supervision team throughout the contract period.

23. If during the Contract implementation CSC replaces more than 50% of staff, penalties will apply. The amount of penalty will be determined during the Contract Negotiation.

4.2 Qualification Requirements for the Key Experts

24. The qualifications required for the various experts in the Consultant's team are presented and summarized in the following table.

Table 4
Qualification Requirements

I. International Experts		
1. Team Leader/Resident Engineer	A licensed civil engineer, with 15 years of experience in construction and construction supervision of asphalt paved roads. The TL/RE shall be fully familiar with different international design standards and with FIDIC Conditions of Contract. He must have proven extensive road construction experience in the execution of road works using different work methods, planning, scheduling and staging of works, construction of temporary works, selection of equipment and personnel, testing and trials, and review of road design. The requirements for this position include experience on similar projects and in similar geographic areas, and proficiency in written and spoken English. Knowledge of locally spoken languages is an advantage.	36 months
2. Contracts Specialist	A civil engineer or quantity surveyor with 15-year experience in contract management of projects funded by international funding agencies such as Asian Development Bank or World Bank, including contractors' claims	10 months

	management, resolution of disputes, and preparations for arbitration proceedings for FIDIC based projects. Must be proficient in English. Experience in similar projects and geographic areas, knowledge of locally spoken languages are an advantage.	
Total person-months		46
II. National Experts		
1. Deputy Resident Engineer/Road Engineer	A bachelor degree in civil engineering with minimum 12 years of experience in road construction, proficient in both written and spoken English. Work experience in similar internationally-funded projects is an advantage.	3 national experts, total 102 months
2. Materials/Quality Assurance Engineer	A bachelor degree in civil engineering with minimum 10 years of experience in material testing on major road construction works. Strong experience in asphalt concrete road pavements, with work experience on at least two similar internationally-funded projects. Proficiency in both written and spoken English is an advantage.	3 national experts, total 99 months
3. Structural Engineer	<ul style="list-style-type: none"> (i) licensed Structural/Bridge Engineer (ii) minimum 15-year of relevant work experience in the design, construction and supervision of bridge works (iii) 10 years experience in in the design, construction and supervision of cross drainage structures for road construction projects (iv) fully familiar with the relevant national bridge design and construction standards (v) experience as Structural/Bridge Engineer on at least 3 international road project assignments (vi) proficiency in both written and spoken English will be an advantage. 	30 months
4. Quantity Surveyor	The quantity surveyor shall have a bachelor degree in civil engineering with preferably 8 years of experience in	3 national experts for a total of 99 months

	quantity surveying, supervision and construction of major road projects. Work experience in similar internationally-funded projects, and proficiency in both written and spoken English are an advantage.	
5. Land Surveyor	Engineering degree, with 10 years of related experience in road and bridge construction. Experience in conducting pre-construction surveys, verification of co-ordinates of the principal survey control points, setting out, checking and verification of the Contractor's main survey control points before the commencement of setting out of the works, conducting as built surveys, measurement of completed works for progress payments.	3 national experts for a total of 99 months
6. Civil Engineer	A qualified civil/building construction engineer, with 10 years of related experience in building construction and design.	1 national expert for 30 months
7. Environmental Safeguard Specialist	<ul style="list-style-type: none"> (i) Bachelor degree in environmental science (i) 5-year experience in carrying out environment impact assessment and monitoring environment safeguards on road projects (ii) Familiarity with ADB environment safeguards policy (iii) Experience with international organizations (iv) Proficiency in both written and spoken English, ability to report in English, Russian and Kazakh (added advantage) 	12 months
8. Social Safeguards Specialist	A bachelor degree in social sciences with preferably 5 years of experience in monitoring social safeguards, and evaluating social impacts on road projects. Work experience on similar internationally-funded projects, and proficiency in both written and spoken English are an advantage.	12 months

9. Road Safety Engineer	A traffic engineer with a university degree, or equivalent professional qualification with minimum 8 years of experience in traffic analysis and forecasting, road safety control, management and analysis during and after the construction works. Work on similar traffic or road safety improvement assignments. Working experience on similar internationally-funded projects, and proficiency in both written and spoken English are an advantage.	33 months
Total person-months		516

25. The Key International Experts shall preferably have at least five years of relevant experience on similar road projects in countries having developed and modern networks of roads and highways, including but not be limited to:

- USA
- Canada
- UK
- Germany
- France
- Italy
- Australia

4.3 Scope of Duties of International Experts

a. Team Leader/Resident Engineer (36 person-months)

26. The Team Leader/ Resident Engineer (TL/RE) will be responsible for overall project management in performing the scope of work indicated in this TOR. Specifically, the TL/RE will:

- (i) Prepare the following documents:
 - detailed work program and timetable of the activities to be implemented with terms of reference of each activity to be implemented;
 - final staffing schedule and terms of reference;
 - quality assurance system and procedures to supervise and monitor contractor performance and report progress and problems on time;
 - coordinating system among team members, Project Director, PMC, and contractors;
 - disbursement schedule;
 - database system to store and retrieve record/data.
- (ii) lead the review of the detailed engineering design, including technical specifications (including bill of quantities), drawings, and construction methods against Kazakhstan road standards. Propose modifications, if necessary;

- (iii) issue notice-to-proceed to contractors for respective road sections or parts of the road sections that have complied with the applicable provisions of the land acquisition and resettlement plan (LARP) and environment management plan (EMP);
- (iv) review and approve contractor's work program, implementation schedule, methodology, and safety plan, and supervise the progress of construction works. Inform the Project Director of any delay or potential delays in the work schedule of the contract, and take necessary actions to prevent potential delays;
- (v) issue notices to the contractor on any non-compliance with road safety plan, environmental mitigation measures, and social safeguards, as set out in the contract documents;
- (vi) issue notices to contractors for defects or deficiencies, and issue instruction for the removal or notify on improper performance of the works;
- (vii) review, approve within his competency, and issue variation orders (scope, cost, materials, time);
- (viii) inspect project sites for work progress and quality;
- (ix) certify payments for the works against the relevant bill of quantities and issue the interim payment certificates, the final payment certificate and other certificates, including delivery-acceptance certificates, as required under the civil works contract;
- (x) coordinate and supervise the work of field teams in supervising and approval of construction following contract conditions;
- (xi) prepare routine and periodic maintenance plan for the project road during their economic life;
- (xii) inspect jointly with MOTC the completed works and assist in formal taking over and review and approve or prepare as-built drawings and plans and provide reports confirming satisfactory completion of the contracts;
- (xiii) inspect the completed work periodically during the defect liability period within the terms covering the consultant's agreement, prepare lists of deficiencies (if any), and carry out supervision of the remedial works, and issue defects liability certificates after the rectification of the notified defects by the contractors;
- (xiv) advise the Project Director with the day-to-day coordination and supervision of civil works construction, including implementation status and issues, and preparation of regular progress reports.

b. Contract Specialist (10 person-months)

27. The scope of duties of the Contracts Specialist includes the following specific tasks:

- (i) review existing contract terms and conditions for their compliance with FIDIC contract conditions, Kazakhstan laws and regulations, and ADB policies; and recommend amendments, if necessary;
- (ii) assist team members, CoR personnel, PMC staff, and contractors in interpreting contract terms and conditions;
- (iii) evaluate or monitor contract performance to determine necessity for amendments or prolongation of contracts, and compliance to contractual obligations;
- (iv) review, approve or reject requests for deviations from contract specifications and delivery schedules; draft amendments to include deviations, if needed;
- (v) review claims or complaints regarding terms, pricing or perceived breach occurring in performance of contracts;

- (vi) pay attention to claim/dispute resolution activities related to price escalation as well as claims caused by delays related to right of way issues (if any), deficiencies in designs (if any), construction specifications and others;
- (vii) serve as liaison officer to ensure fulfillment of obligations by contractors;
- (viii) advise TL/RE and ARE on potential expected claims and management of actual claims;
- (ix) maintain and manage the database related to contract administration.

4.4 Scope of Duties of National Experts

a. Deputy Resident Engineer/Road Engineer (3 national experts, 92 person-months)

28. The Deputy Resident Engineer (DRE) will assist the TL/RE in:

- (i) coordinating and supervising road construction works on site, on a day-to-day basis
- (ii) monitor the Contractor's work schedule and construction progress,
- (iii) supervise quality of the construction work on Site
- (iv) prepare draft monthly Interim Payment Certificates
- (v) review and approve Contractor's shop drawings and as-built-drawings
- (vi) issue instructions to the Contractor within the authority of the Engineer delegated to him
- (vii) prepare reports.

b. Materials/Quality Assurance Engineer (3 national experts, 89 person-months)

29. This expert will:

- (i) carry out day-to-day supervision of the Contractor's Quality Assurance system
- (ii) supervise and monitor the contractor's testing on a day-to-day basis
- (iii) verify whether the works and materials on site comply with material specifications
- (iv) supervise the contractor's work, and certify that the completed work complies with the contract
- (v) approve construction materials and sources of supply
- (vi) approve material testing methods
- (vii) Recommend acceptance/rejection of the completed works and works in progress to the RE.

c. Structural Engineer (30 person-month)

30. The scope of duties of the Structural Engineer shall include, but will not be limited to the following:

- (i) review and evaluate detailed designs of bridges, culverts and all ancillary structures and recommend improvements;
- (ii) review and evaluate the hydrological and geotechnical reports and data and make appropriate technical recommendations
- (iii) provide input to the Team Leader for the overall detailed design review report;
- (iv) manage the day-to-day supervision of bridge construction on the site and the construction of culverts and retaining structures;

- (v) recommend for approval of otherwise the shop drawings for all structural works submitted by the Contractor;
- (vi) draft for the Team Leader instructions, rejections and approval of structural works;
- (vii) monitor contactors' work performance against technical specifications and schedules for production of bridge and culvert structures and parts,
- (viii) prepare inspection reports,
- (ix) discuss with the TL and DRE any bridge design/construction issues and recommend technical solutions/options.
- (x) inspect material specifications and the actual material at the site for placement and workmanship during implementation.
- (xi) assist the Team Leader in all matters related to the implementation of the project scope, as required.

c. Quantity Surveyor (3 national experts, 89 person-months)

31. The scope of duties of the Quantity Surveyor include the following main tasks:

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

d. Land Surveyor (3 national experts, 89 person-months)

32. The scope of duties of the Land Surveyor include the following main tasks:

- (i) physical checking of the Contractor's setting out in the field, reporting the discrepancies to Resident Engineer for the possible amendments/remedies
- (ii) checking whether the levels and lines of the completed works are in accordance with contract / construction drawings
- (iii) verification of the co-ordinates of the principal survey control points
- (iv) checking and verification of the Contractor's main survey control points before the commencement of setting out of the works
- (v) checking the Contractor's setting out of the works before the commencement of construction
- (vi) assisting the Resident Engineer and all supervisors by providing measurements and levels necessary for the measurement of the works
- (vii) assisting the Resident Engineer's staff in checking the Contractor's setting out

e. Civil Engineer (1 national expert, 30 person-months)

33. The Civil Engineer will be engaged to supervise all aspects of the construction of the Road Maintenance Depos/Compounds on the Site. Under the guidance of the DRE, the Civil Engineer.

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

f. Environmental Safeguards Specialist (12 person-months)

34. The scope of duties of the Environmental Specialist includes the following specific tasks:

- (i) coordinate with relevant parties, including civil society organizations, on environment requirements of the Project;
- (ii) closely monitor project sites against any unexpected environmental impacts.
- (iii) monitor contractors' compliance with EMP;
- (iv) monitoring of the implementation of the EMPs by contractors
- (v) liaise with environmental specialists of the PMC in preparation of the semi-annual environmental monitoring reports and inputs to quarterly progress reports
- (vi) advise the Project Director and the PMC on environment problems and/or requirements, and recommend mitigating measures;

g. Social Safeguards Specialist (12 person-months)

35. The scope of duties of the Social Safeguard Specialist includes the following specific tasks:

- (i) manage and coordinate the update, implementation and monitoring of the approved Land Acquisition and Resettlement Plan (LARP) as required by the loan agreement;
- (ii) set up internal monitoring system on the project's social and resettlement issues and requirements;
- (iii) select and review an External Monitoring Agency (EMA) to be approved by the Program's Director;
- (iv) coordinate with relevant parties, including civil society organizations, on social/environment activities/ requirements of the project;
- (v) set up redress of grievance mechanism for project activities;
- (vi) monitor contractors' compliance to (a) main labor standards, labor laws and incorporate applicable workplace occupational safety norms; (b) absence of differentiation of payment between men and women for work of equal value; (c) no child labor in the construction and maintenance activities; (d) no forced or compulsory labor; (e) discrimination in respect of employment; (f) freedom of

- association; (g) as possible, maximize employment of local poor and disadvantaged persons for project construction purposes provided that the requirements for job and efficiency are adequately met; and (h) land acquisition and resettlement framework and plans;
- (vii) take actions based on findings and requirements of EMA reports;
- (viii) advise MIID on social safeguard/ resettlement problems/requirements, and recommend measures;
- (ix) prepare report on LARP implementation;
- (x) perform social impact monitoring surveys in project areas as part of project performance monitoring and evaluation;
- (xi) review the Poverty and Social Analysis (PSA) developed by national expert;
- (xii) assess and prepare capacity building program on social issues.
- (xiii) Assist road safety engineer in carrying out gender sensitive (in terms of targeting and communication channels and materials) road safety awareness campaign.

h. Road Safety Engineer (33 person-months)

36. The Road Safety Engineer will:

- (i) develop and implement a traffic management and road safety plan with monitoring indicators for the Project;
- (ii) coordinate traffic re-routing schemes and safety measures with the local and state governments, contractors, and community members
- (iii) monitor contractors' compliance to the road safety plan to avoid damage or injury to persons or property at initial stage and during road construction;
- (iv) review traffic safety measures taken by contractors during the construction activities, and implement preventive and remedial measures against occurrence of road accidents;
- (v) liaise with local and state government, contractors, and members of the community in relation to implementation of the traffic management and road safety plan during road construction
- (vi) prepare and submit safety audit reports
- (vii) conduct road safety audits and reviews;
- (viii) Carry out, with the assistance of social safeguards specialist, gender sensitive (in terms of targeting and communication channels and materials) road safety awareness campaign.

5. Reporting Requirements and Time Schedule for Deliverable

5.1 Consultant's Mobilization

37. The Consultant shall mobilize the Team Leader within 14 days of being issued with a notice to proceed by the Client. The mobilization of other staff shall be staged and agreed with the Client to suit the actual progress of contract awards and contractors' mobilization schedules.

5.2 Reporting

38. The Consultant shall prepare the reports listed in the **Table 2**. Reports to the Client shall be given in in English (4 copies) and Russian (4 copies).

5.3 Implementation Arrangements

39. MIID is the executive agency for the Investment Program. The Committee for Roads is the implementing agency.

40. The Deputy Chairman of the Committee of Roads shall be responsible for overall implementation of the Investment Program including the project preparation, project implementation, as well as project monitoring and reporting. The PMC will assist the Committee in implementing the Project. The Consultant will report to the Committee administration and PMC.

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

6. Client's Input and Counterpart Personnel

6.1 Services, facilities and property to be made available to the Consultant by the Client

42. The Contractor will provide the Consultant rented offices with auxiliary facilities at project areas (3 offices); and cover all working costs, including lease of land transport for supervision activities (12 vehicles for the whole working day, excluding the Defects Notification Period) as well as communication and other costs necessary for performance of Project tasks.

43. MIID will provide for the Consultant's international staff:

- (i) invitation letters for obtaining visas; and
- (ii) technical information and design documents in the possession of the Client.

6.2 Professional and support counterpart personnel to be assigned by the Client to the Consultant's team

44. None

6.3 Inputs, project data and reports to facilitate preparation of the Proposals provided by the Client

45. N/A

4. Cost and Financing

46. The cost of the consulting services is estimated at \$5.40 million, refer to below Table.

Cost Estimates^(a)

Competitive Components:	Amount (USD)
Remuneration key experts	2,931,076
Remuneration non-key experts	230,704
Reimbursable Expenses	1,138,220
Sub-Total	4,300,000
Non-Competitive Components:	

Provisional Sums	0.00
Contingency	200,000
Sub-Total	200,000
Total Cost excluding VAT	4,500,000
VAT	540,000
GRAND-TOTAL	5,040,000

(a) The project cost estimates will be finalized before the start of the projects.

B. Construction Supervision Consultant (CSC-2)

1. Background

47. The CAREC Corridors 1 and 6 Connector Road (Aktobe–Makat) Reconstruction Project (the Project) is financed jointly by the Government of the Republic of Kazakhstan (the Government) through the Ministry of Industry and Infrastructure Development (MIID), and the Asian Development Bank. The objective of the Project is to reconstruct the 299 km of Aktobe–Makat road, which connects the capitals and administration centers of the Oblasts of Aktobe and Atyrau. This road is also a key connector of international corridors.

48. This investment program will result in enhanced regional cooperation and inclusive economic growth in Kazakhstan, particularly in the Oblasts of Atyrau and Aktobe, with substantially improved road connectivity and mobility between Aktobe and Atyrau. The project outputs will be (i) approximately 299 km of the road section between Aktobe and Makat reconstructed and upgraded to category II standard, and (ii) an implementation-ready blue-print for the introduction of ITS.

49. The Asian Development Bank finances this investment program which comprises physical investments for upgrading roads infrastructure and facilities, and nonphysical investments for institutional capacity development, which includes project preparation, project management and asset management, strengthening the safeguards implementation and road safety, and the introduction of ITS.

50. The physical investment include the road sections shown in the following table:

Table 1
Project Road Sections

Road Section	Length (Km)	Type of pavement	Technical Road Category
Aktobe Oblast			
Lot 1, Km 160 – Km 220	60	Asphalt concrete	Category II
Lot 2, Km 236 – Km 275	39	Asphalt concrete	Category II
Lot 3, Km 275 - Km 330	55	Asphalt concrete	Category II
Atyrau Oblast			
Lot 4, Km 330 - Km 370	40	Asphalt concrete	Category II
Lot 5, Km 370 - Km 418	48	Asphalt concrete	Category II
Lot 6, Km 418 - Km 458	40	Asphalt concrete	Category II
Lot 7, Km 487 - Km 504	17	Asphalt concrete	Category II

2. Objectives of the Assignments

51. The Ministry of Industry and Infrastructure Development (MIID) will be the Client under the Contract for Services of the Construction Supervision Consultant (the Consultant). The Client requires a qualified international consulting firm to provide engineering and construction supervision services for civil works procured as Lots 4 to 7, and to assist the Executing Agency with implementation of the project in Atyrau Oblast. The civil works will be executed under the contracts which incorporate Conditions of Contract of the International Federation of Consulting Engineers (FIDIC), MDB Harmonized Edition, June 2010. The main objectives of the Assignment of the Consultant are:

- (i) to ensure completion of the civil works within the scope, quality and time specified in the contract
- (ii) to perform the duties of the Engineer FIDIC
- (iii) to assist the Client in day-to-day execution of the project in Atyrau Oblast.

3. Scope of Services, Tasks (Components) and Expected Deliverables

3.1 Scope of Services

52. The Construction Supervision Consultant will:

- (i) supervise and administrate all civil works contracts as the Engineer FIDIC
- (ii) ensure that all works comply with the approved engineering designs and technical specifications, agreed schedule and budget, terms and conditions of the contracts, standard engineering practice, and ADB's safeguards policies;
- (iii) issue instructions to contractors
- (iv) monitor implementation of the land acquisition and resettlement (LARP)
- (v) supervise and monitor implementation of the Environmental Management Plan by contractors
- (vi) ensure that the contractors provide adequate road safety measures throughout the road construction period and give design recommendations for improvement of road safety
- (vii) make engineering decisions in consultation with the Client, Project Director and Project Management Consultant (PMC);
- (viii) advise the Client, Project Director and PMC on work progress, quality control, and implementation issues, if any.
- (ix) Carryout at least quarterly inspection visits during the Defects Notification Periods;
- (x) During the Defect Liability Period, in compliance with the Legislation of the Republic of Kazakhstan, autumn and spring inspections of the road will be conducted each lasting two weeks. The Consultant shall be in attendance and is obliged to check results of these inspections and issue the decision whether there are defects to be remedied under the contract terms and provisions. The Consultant's presence during the inspection periods is mandatory.
- (xi) Undertake a final inspection of the Works, and after consulting with the Employer, and all other interested parties, and if satisfied, issue the Defects Liability Certificate at the end of the Defects Liability Period.

2.2 Specific Tasks

53. The main tasks the Consultant is required to perform under the contract are grouped and specified under the following headings.

2.2.1 Design Review

54. This task includes review of the detailed engineering design for its correctness and safety prior to the commencement of civil works. The Consultant is required to submit reports on his findings and conclusions and propose modifications or corrections to any defects or omissions.

2.2.2 Construction Supervision and Contract Administration

55. The Consultant is required to perform the following specific tasks necessary for effective and efficient supervision and administration of the civil works contracts:

- (i) Ensure that the construction methods proposed by the Contractor for carrying out the works are satisfactory.
- (ii) Inspect contractor's construction equipment; results of testing of material and soil, operations safety, property and personnel, and schedule of mitigation measures for adverse environmental impacts.
- (iii) Notify the Contractor to remedy works and materials that fail to comply with the specifications.
- (iv) Monitor and supervise (a) progress of contractors' works vis-à-vis contract schedule, and (b) quality of contractors' works vis-à-vis applicable technical specifications.
- (v) Check that "as built" drawing prepared by the contractors for all works during construction processes.
- (vi) Ensure that road safety design requirements are implemented in accordance with the contract specifications.
- (vii) Develop adequate quality assurance system and quality control plan for asphalt concrete pavement.
- (viii) Establish procedures to check contractor performance and timely submission of report on problems, including quality control reports, acceptance certificates, requests for variation or change orders, and contractor's claims and invoices.
- (ix) Evaluate any proposed changes (e.g., time, scope and cost) that may be submitted by the contractors.
- (x) Review and certify quantities of completed works, and process interim and final payments of the contractors.
- (xi) Issue interim payment certificates within the period specified in the contract
- (xii) Ensure that project financial management procedures are in place and are strictly followed, specifically relating to payments, financial accounting, requests for prolongation, and contractors' claims and invoices.

2.2.3 Safeguards Compliance Monitoring

56. The Consultant is required to carry out the following duties related to environmental mitigation²² throughout the construction of civil works

²² With particular reference to the technical requirements of sound environmental standards on the basis of ADB's *Environmental Guidelines for Selected Infrastructure development Projects (Highways and Roads)* during construction.

- (i) ensure that all the environmental mitigation measures required to be implemented are incorporated in the contract documents;
- (ii) supervise and monitor implementation of the contractors' environmental mitigation plans (EMP)
- (iii) in case of unexpected environmental impacts, coordinate with the Client and PMC to recommend necessary mitigation measures to the Committee of Roads and ADB for implementation.
- (iv) monitor and report on the land acquisition and resettlement plan (LARP) implementation.
- (v) Monitor contractors' compliance with and performance of required actions regarding HIV/AIDS, human trafficking, and labor standards in accordance with the contract documents, such as awareness and education of workers and residents in the Project area.
- (vi) Ensure that the contractors do not employ child labor in the execution of the civil works contracts in accordance with the provisions of the contract.

2.2.4 Documentation and Reporting

57. The main documentation and reporting tasks of the Consultant are specified as follows:

- (i) Report on and update the works implementation schedule, highlight any unforeseen delays, and timely propose corrective measures.
- (ii) Undertake project performance monitoring and evaluation²³ and reporting up to project completion.
- (iii) Collect baseline survey data based on the indicators in the detailed project and monitoring framework; and measure the indicators of overtime during the assignment period. Design a simple MS Excel or similar system for recording primary and periodic data.
- (iv) Prepare and submit all reports specified under this section of the Terms of Reference (the ToR), within the specified deadlines
- (v) Develop and maintain a storage and retrieval system for documents containing information supplied by the field teams, decisions made at meetings, progress of civil works, certified achievements and milestones, financial reports, deviations from or changes to the contract plans (scope, cost, materials, time), correspondences, site diaries, test data and quality control reports, quantity survey records, as-built drawings, and progress reports.

2.2.5 Traffic management

58. The Consultant is required to take the actions in relation to traffic safety:

- (i) Prepare traffic management plans/ road safety plans;
- (ii) Keep records of accidents;
- (iii) Closely cooperate with road police in relation to traffic safety;
- (iv) Control the contractor to follow the traffic safety measures.

2.2.6 Additional Services

²³ Following the project framework and ADB's *Project Performance Management System Handbook*.

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

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

2.3 Deliverable

61. All deliverables, such as reports, plans, manuals and other documents shall be prepared and delivered in English (4 copies) and Russian (4 copies). The schedule of deliverables the Consultant is required to submit to the Client is shown the following table.

Table 2
Schedule of Deliverables

Deliverable	Description/Scope	Due date of issue
Inception Report	The report shall include methodology, performance indicators with assumptions and risks, detailed work plan and timetable of the activities to be implemented, terms of reference specific to each individual activity, staffing and final terms of reference, supervision and monitoring procedure, and coordination arrangement among team members, contractors, Project Director, and PMC.	60 days after the Effective Date of the Contract for Consulting Services
Detailed Design Review Report for each Lot	Findings of the Consultant's review of the detailed designs, Specifications, Drawings and Bill of Quantities for all works and recommendations for making good any defects or omissions identified.	45 days after the Effective Date of the Contract for Consulting Services
Traffic Management and Road Safety Plans	A detailed report on the Traffic Management Plan submitted by the Contractor and approved by the Engineer	60 days after the Commencement Date for each Lot
Consultant's Construction Supervision and Contracts Administration Manual	The Manual shall provide detailed construction supervision and administration procedures to be applied to by the Consultant's staff throughout the construction and Defects Notification Period	90 days after the Effective Date
Monthly reports	Monthly Progress Reports must include the following information: (a) evaluation of the physical progress of civil works against the implementation schedule and output targets, (b) financial progress (c) quality assurance, (d)	By the 7 th day of the following month

Deliverable	Description/Scope	Due date of issue
	issues/problems with planned actions or actions undertaken to resolve the issues/problems. Each monthly report must include brief sections on environmental monitoring, and land acquisition resettlement report.	
Quarterly report	<p>The scope of Quarterly Progress Reports must include updated information on::</p> <ul style="list-style-type: none"> (x) project outputs, physical progress (xi) contractors' performance (xii) quality assurance (xiii) financial progress (project cost and fund utilization and financial management) (xiv) safeguards (EMP and LAPR implementation and monitoring) (xv) status of VOs, (xvi) list of progress and safeguards reports, (xvii) updated information on monitoring traffic management/road safety plan (xviii) list and status of IPCs 	15 days after the expiry of each quarter since the Effective Date of the Consultant's contract for consulting services until the completion of the Project.
Semi-annual environmental reports	Review of the implementation of EMP, performance of the monitoring system, summary of the main environmental issues, and options and recommendations for problem solving	Every 6 months after the Effective Date
Internal LARP compliance monitoring reports	Observations, findings, issues, non-compliance, and any variance from the provisions of the LARP, recommended actions necessary to ensure compliance with the terms of the approved LARP and ADB's Safeguard Policy Statement (2009).	Every 6 months after the Effective Date
Supplementary LARP	If newly affected people are identified during the project implementation, the Consultant will produce a Supplementary LARP in accordance with ADB Safeguard policies	If required
Project Performance Monitoring Reports	Collection and analysis of baseline data on social, economic, and project engineering aspects in the area affected by each road construction project/contract, with midterm updates and the final report. The reports are to be structured in accordance with standard ADB requirements for such reports.	First report, 60 days after the commencement of the consulting services. The due dates for midterm and final reports to be agreed with the Client.
Draft Project Completion Report	The content shall be in accordance with ADB format.	At 90% physical completion of the

Deliverable	Description/Scope	Due date of issue
		Project
Project Completion Report	The content shall be prepared in ADB format	60 days after the physical completion of the Project, or at a different date agreed with the Client.

62. Hard and electronic copies of all deliverables shall be delivered to the following persons/departments:

1. Committee for Roads, Mr. Ablaliev S.A.
Address: 32/1, Kabanbai str., Astana, Kazakhstan
Email: s.ablaliyev@mid.gov.kz
Fax number: + 7 7172

2. Project Management Consultant, Mr.____
Address:

4. Team Composition & Qualification Requirements for the Key Experts

4.1. Team Composition

63. The Client will select an international firm in association with national consultants, to carry out the tasks in this TOR. The Consultant will be recruited in accordance with ADB Guidelines on the Use of Consultants (2013, as amended from time to time).

64. Consulting services require a total of **41** person-months of international experts and **577** person-months of national experts, and will take place over **53** months, including construction period 29 months with intermittent input of 4 months of relevant specialists during the Defects Notification Period 24 months.

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

Table 3
Consultant's Personnel Schedule

Position	No.	Person- Month	Position	No.	Person- Month
Team Leader/Resident Engineer	1	31*	Deputy Resident Engineer/ Road Engineer	4*	118
			Materials/QA Engineer	4	116
			Quantity Surveyor	4	116
Contracts Specialist	1	10	Structural Engineer	1	29
			Land Surveyor	4	116
			Road Safety Engineer	1	29
			Civil Engineer	1	29

			Environmental Specialist	Safeguards	1	12
			Social Safeguards Specialist		1	12
Key Experts (International)	2	41	Key Experts (National)		21	577

* The construction period is 29 months; Team Leader and one Deputy Resident Engineer have two additional months for monitoring during the Defect Notification Period.

66. In addition to the Key International and National Experts listed in Table 3, the CSC shall also provide sufficient number of properly qualified Non-Key Experts necessary for day-to-day supervision and quality control of the works on site, including Site Inspectors/Supervisors and Laboratory Assistants.
67. Further, the Consultant is required to provide supporting staff, including an office manager, sufficient number of translators/interpreters and other staff and services that the Consultant will need to establish and maintain effective administrative, management and logistics support to his supervision team throughout the contract period.
68. If during the Contract implementation CSC replaces more than 50% of staff, penalties will apply. The amount of penalty will be determined during the Contract Negotiation.

4.2. Qualification Requirements for the Key Experts

69. The qualifications required for the various experts in the Consultant's team are presented and summarized in the following table.

Table 4
Qualification Requirements

I. International Experts		
1. Team Leader/Resident Engineer	A licensed civil engineer, with 15 years of experience in construction and construction supervision of asphalt paved roads. The TL/RE shall be fully familiar with different international design standards and with FIDIC Conditions of Contract. He must have proven extensive road construction experience in the execution of road works using different work methods, planning, scheduling and staging of works, construction of temporary works, selection of equipment and personnel, testing and trials, and review of road design. The requirements for this position include experience on similar projects and in developed countries (as Canada, USA, Germany, Japan, France, UK, Sweden) and proficiency in written and spoken English. Knowledge of locally spoken languages is an	31 months

	advantage.	
2. Contracts Specialist	A civil engineer or quantity surveyor with 15-year experience in contract management of projects funded by international funding agencies such as Asian Development Bank or World Bank, including contractors' claims management, resolution of disputes, and preparations for arbitration proceedings for FIDIC based projects. Must be proficient in English. Experience in similar projects and geographic areas, knowledge of locally spoken languages are an advantage.	10 months
Total person-months		41
II. National Experts		
1. Deputy Resident Engineer/Road Engineer	A bachelor degree in civil engineering with minimum 12 years of experience in road construction, proficient in both written and spoken English. Work experience in similar internationally-funded projects is an advantage.	4 national experts, total 118 months
2. Materials/Quality Assurance Engineer	A bachelor degree in civil engineering with minimum 10 years of experience in material testing on major road construction works. Strong experience in asphalt concrete road pavements, with work experience on at least two similar internationally-funded projects. Proficiency in both written and spoken English is an advantage.	4 national experts, total 116 months
3. Structural Engineer	(vii) licensed Structural/Bridge Engineer (viii) minimum 15-year of relevant work experience in the design, construction and supervision of bridge works (ix) 10 years' experience in in the design, construction and supervision of cross drainage structures for road construction projects (x) fully familiar with the relevant national bridge design and construction standards	29 months

	<p>(xi) experience as Structural/Bridge Engineer on at least 3 international road project assignments</p> <p>(xii) proficiency in both written and spoken English will be an advantage.</p>	
4. Quantity Surveyor	The quantity surveyor shall have a bachelor degree in civil engineering with preferably 8 years of experience in quantity surveying, supervision and construction of major road projects. Work experience in similar internationally-funded projects, and proficiency in both written and spoken English are an advantage.	4 national experts for a total of 116 months
5. Land Surveyor	Engineering degree, with 10 years of related experience in road and bridge construction. Experience in conducting pre-construction surveys, verification of co-ordinates of the principal survey control points, setting out, checking and verification of the Contractor's main survey control points before the commencement of setting out of the works, conducting as built surveys, measurement of completed works for progress payments.	4 national experts for a total of 116 months
6. Civil Engineer	A qualified civil/building construction engineer, with 10 years of related experience in building construction and design.	1 national expert for 29 months
7. Environmental Safeguard Specialist	<p>(ii) Bachelor degree in environmental science</p> <p>(v) 5-year experience in carrying out environment impact assessment and monitoring environment safeguards on road projects</p> <p>(vi) Familiarity with ADB environment safeguards policy</p> <p>(vii) Experience with international organizations</p> <p>(viii) Proficiency in both written and spoken English, ability to report in English, Russian and Kazakh (added advantage)</p>	12 months

8. Social Safeguards Specialist	A bachelor degree in social sciences with preferably 5 years of experience in monitoring social safeguards, and evaluating social impacts on road projects. Work experience on similar internationally-funded projects, and proficiency in both written and spoken English are an advantage.	12 months
9. Road Safety Engineer	A traffic engineer with a university degree, or equivalent professional qualification with minimum 8 years of experience in traffic analysis and forecasting, road safety control, management and analysis during and after the construction works. Work on similar traffic or road safety improvement assignments. Working experience on similar internationally-funded projects, and proficiency in both written and spoken English are an advantage.	29 months
Total person-months		577

70. The Key International Experts shall preferably have at least five years of relevant experience on similar road projects in countries having developed and modern networks of roads and highways, including but not be limited to:

- USA
- Canada
- UK
- Germany
- France
- Italy
- Australia

4.3 Scope of Duties of International Experts

a. Team Leader/Resident Engineer (31 person-months)

71. The Team Leader/ Resident Engineer (TL/RE) will be responsible for overall project management in performing the scope of work indicated in this TOR. Specifically, the TL/RE will:

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

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

b. Contract Specialist (10 person-months)

72. The scope of duties of the Contracts Specialist includes the following specific tasks:

- (i) review existing contract terms and conditions for their compliance with FIDIC contract conditions, Kazakhstan laws and regulations, and ADB policies; and recommend amendments, if necessary;
- (ii) assist team members, COR personnel, PMC staff, and contractors in interpreting contract terms and conditions;
- (iii) evaluate or monitor contract performance to determine necessity for amendments or prolongation of contracts, and compliance to contractual obligations;
- (iv) review, approve or reject requests for deviations from contract specifications and delivery schedules; draft amendments to include deviations, if needed;
- (v) review claims or complaints regarding terms, pricing or perceived breach occurring in performance of contracts;
- (vi) pay attention to claim/dispute resolution activities related to price escalation as well as claims caused by delays related to right of way issues (if any), deficiencies in designs (if any), construction specifications and others;
- (vii) serve as liaison officer to ensure fulfillment of obligations by contractors;
- (viii) advise TL/RE and ARE on potential expected claims and management of actual claims;
- (ix) maintain and manage the database related to contract administration.

4.4 Scope of Duties of National Experts

a. Deputy Resident Engineer/Road Engineer (4 national experts, 104 person-months)

73. The Deputy Resident Engineer (DRE) will assist the TL/RE in

- (i) coordinating and supervising road construction works on site, on a day-to-day basis
- (ii) monitor the Contractor's work schedule and construction progress,
- (iii) supervise quality of the construction work on Site
- (iv) prepare draft monthly Interim Payment Certificates
- (v) review and approve Contractor's shop drawings and as-built-drawings
- (vi) issue instructions to the Contractor within the authority of the Engineer delegated to him
- (vii) prepare reports.

b. Materials/Quality Assurance Engineer (4 national experts, 102 person-months)

74. This expert will:

- (i) carry out day-to-day supervision of the Contractor's Quality Assurance system

- (ii) supervise and monitor the contractor's testing on a day-to-day basis
- (iii) verify whether the works and materials on site comply with material specifications
- (iv) supervise the contractor's work, and certify that the completed work complies with the contract
- (v) approve construction materials and sources of supply
- (vi) approve material testing methods
- a. Recommend acceptance/rejection of the completed works and works in progress to the RE.

c. Structural Engineer (29 person-months)

75. The scope of duties of the Structural Engineer shall include, but will not be limited to the following:

- (i) review and evaluate detailed designs of bridges, culverts and all ancillary structures and recommend improvements;
- (ii) review and evaluate the hydrological and geotechnical reports and data and make appropriate technical recommendations
- (iii) provide input to the Team Leader for the overall detailed design review report;
- (iv) manage the day-to-day supervision of bridge construction on the site and the construction of culverts and retaining structures;
- (v) recommend for approval of otherwise the shop drawings for all structural works submitted by the Contractor;
- (vi) draft for the Team Leader instructions, rejections and approval of structural works;
- (vii) monitor contractors' work performance against technical specifications and schedules for production of bridge and culvert structures and parts,
- (viii) prepare inspection reports,
- (ix) discuss with the TL and DRE any bridge design/construction issues and recommend technical solutions/options.
- (x) inspect material specifications and the actual material at the site for placement and workmanship during implementation.
- (xi) assist the Team Leader in all matters related to the implementation of the project scope, as required.

d. Quality Surveyor (4 national experts, 102 person-months)

76. The scope of duties of the Quantity Surveyor include the following main tasks:

- (i) review the bill of quantities vis-à-vis the technical specifications provided by the Client, and recommend modifications, if required;
- (ii) control and measure the quantity of materials and workers at the construction site to minimize the amount of materials used, and make sure that the construction costs stay within budget;
- (iii) review contractors' interim and final payment certificates, and check quantities billed vis-à-vis measurements;
- (iv) prepare change orders and variation orders as required;
- (v) prepare and maintain quantity books, and up-to-date rates-list for materials and works;
- (vi) prepare and manage monthly financial reports;

- (vii) prepare disbursement schedule and maintain progress schedules and cash flow chart; and
- (viii) maintain current as-built drawings as the work progresses.

e. Land Surveyor (4 national experts, 102 person-months)

77. The scope of duties of the Land Surveyor include the following main tasks:

- (i) physical checking of the Contractor's setting out in the field, reporting the discrepancies to Resident Engineer for the possible amendments/remedies
- (ii) checking whether the levels and lines of the completed works are in accordance with contract / construction drawings
- (iii) verification of the co-ordinates of the principal survey control points
- (iv) checking and verification of the Contractor's main survey control points before the commencement of setting out of the works
- (v) checking the Contractor's setting out of the works before the commencement of construction
- (vi) assisting the Resident Engineer and all supervisors by providing measurements and levels necessary for the measurement of the works
- (vii) assisting the Resident Engineer's staff in checking the Contractor's setting out

f. Civil Engineer (1 national expert, 29 person-months)

78. The Civil Engineer will be engaged to supervise all aspects of the construction of the Road Maintenance Depos/Compounds on the Site. Under the guidance of the DRE, the Civil Engineer.

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

g. Environmental Safeguards Specialist (12 person-month)

79. The scope of duties of the Environmental Specialist includes the following specific tasks:

- (i) coordinate with relevant parties, including civil society organizations, on environment requirements of the Project;
- (ii) closely monitor project sites against any unexpected environmental impacts.
- (iii) monitor contractors' compliance with EMP;
- (iv) monitoring of the implementation of the EMPs by contractors
- (v) liaise with environmental specialists of the PMC in preparation of the semi-annual environmental monitoring reports and inputs to quarterly progress reports.
- (vi) advise the Project Director and the PMC on environment problems and/or requirements, and recommend mitigating measures;

h. Social Safeguards Specialist (12 person-months)

80. The scope of duties of the Social Safeguard Specialist includes the following specific tasks:

- (i) manage and coordinate the update, implementation and monitoring of the approved Land Acquisition and Resettlement Plan (LARP) as required by the loan agreement;
- (ii) set up internal monitoring system on the project's social and resettlement issues and requirements;
- (iii) select and review an External Monitoring Agency (EMA) to be approved by the Program's Director;
- (iv) coordinate with relevant parties, including civil society organizations, on social/environment activities/ requirements of the project;
- (v) set up redress of grievance mechanism for project activities;
- (vi) monitor contractors' compliance to (a) main labor standards, labor laws and incorporate applicable workplace occupational safety norms; (b) absence of differentiation of payment between men and women for work of equal value; (c) no child labor in the construction and maintenance activities; (d) no forced or compulsory labor; (e) discrimination in respect of employment; (f) freedom of association; (g) as possible, maximize employment of local poor and disadvantaged persons for project construction purposes provided that the requirements for job and efficiency are adequately met; and (h) land acquisition and resettlement framework and plans;
- (vii) take actions based on findings and requirements of EMA reports;
- (viii) advise MIID on social safeguard/ resettlement problems/requirements, and recommend measures;
- (ix) prepare report on LARP implementation;
- (x) perform social impact monitoring surveys in project areas as part of project performance monitoring and evaluation;
- (xi) review the Poverty and Social Analysis (PSA) developed by national expert;
- (xii) assess and prepare capacity building program on social issues;
- (xiii) Assist road safety engineer in carrying out gender sensitive (in terms of targeting and communication channels and materials) road safety awareness campaign.

i. Road Safety Engineer (29 person-months)

81. The Road Safety Engineer will:

- (i) develop and implement a traffic management and road safety plan with monitoring indicators for the Project;
- (ii) coordinate traffic re-routing schemes and safety measures with the local and state governments, contractors, and community members
- (iii) monitor contractors' compliance to the road safety plan to avoid damage or injury to persons or property at initial stage and during road construction;
- (iv) review traffic safety measures taken by contractors during the construction activities, and implement preventive and remedial measures against occurrence of road accidents;

- (v) liaise with local and state government, contractors, and members of the community in relation to implementation of the traffic management and road safety plan during road construction
- (vi) prepare and submit safety audit reports
- (vii) conduct road safety audits and reviews;
- (viii) Carry out, with the assistance of social safeguards specialist, gender sensitive (in terms of targeting and communication channels and materials) road safety awareness campaign.

5. Reporting Requirements and Time Schedule for Deliverable

5.1 Consultant's Mobilization

82. The Consultant shall mobilize the Team Leader within 14 days of being issued with a notice to proceed by the Client. The mobilization of other staff shall be staged and agreed with the Client to suit the actual progress of contract awards and contractors' mobilization schedules.

5.2 Reporting

83. The Consultant shall prepare the reports listed in the **Table 2**. Reports to the Client shall be given in English (4 copies) and Russian (4 copies).

5.3 Implementation Arrangements

84. MIID is the executive agency for the Investment Program. The Committee for Roads is the implementing agency.

85. The Deputy Chairman of the Committee of Roads shall be responsible for overall implementation of the Investment Program including the project preparation, project implementation, as well as project monitoring and reporting. The PMC will assist the Committee in implementing the Project. The Consultant will report to the Committee administration and PMC.

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

6. Client's Input and Counterpart Personnel

6.1 Services, facilities and property to be made available to the Consultant by the Client

87. The Contractor will provide the Consultant rented offices with auxiliary facilities at project areas (4 offices); and cover all working costs, including lease of land transport for supervision activities (16 vehicles for the whole working day, excluding the Defects Notification Period) as well as communication and other costs necessary for performance of Project tasks.

88. MIID will provide for the Consultant's international staff:

- technical information and design documents in the possession of the Client.

6.2 Professional and support counterpart personnel to be assigned by the Client to the Consultant's Team

89. None

6.3 Inputs, project data and reports to facilitate preparation of the Proposals provided by the Client

90. N/A

7. Cost and Financing

91. The cost of the consulting services is estimated at \$5.38 million, refer to below Table.

Cost Estimates^a

Competitive Components:	Amount (USD)
Remuneration key experts	3,135,570
Remuneration non-key experts	246,799
Reimbursable Expenses	1,217,631
Sub-Total	4,600,000
Non-Competitive Components:	
Provisional Sums	0.00
Contingency	200,000
Sub-Total	200,000
Total Cost excluding VAT	4,800,000
VAT	576,000
GRAND-TOTAL	5,376,000

^a The project cost estimates will be finalized before the start of the projects.

Draft Terms of Reference for Intelligent Transport System

Consulting services for the development and implementation of Kazakhstan National Intelligent Transport System

I. Background and Rationale

1. The introduction of Intelligent Transport System (ITS) is aimed at improving overall transportation system performance through reduced congestion, increased safety, and more efficient movements of goods and services. ITS is the application of computer, electronics, and communication technologies and management strategies in an integrated manner to provide road user information which will increase safety and efficiency of the road transportation systems. ITS enables elements of the transport system, including vehicles, roads, traffic lights, and message signs, to become intelligent by embedding them with microchips and sensors and empowering them to communicate with each other through wireless technologies.

2. The efficiency and safety of Kazakhstan's transport system is impeded by numerous problems including traffic engineering, safety provisions, and road conditions. Addressing them requires systematic efforts based on modern information technology yet to be tried in the country. The Government has adopted a strategic goal of accelerated industrial-innovative development, which cannot be achieved without developing the transport industry and introducing information and communication technologies. Improving the quality of transport is expected to provide a solid foundation for socio-economic modernization and enhanced international competitiveness. Making use of the country's substantial transit potential requires modern infrastructure and services for the collection, processing, and analysis of data, as well as enabling the public to make use and benefit from such information.

3. ITS in Kazakhstan is at an early stage of development. The Government, supported by ADB's Investment Program, has conducted a scoping study to assess the adequacy of the existing institutional and regulatory environment, to determine the scope of services and investments, and, based on this, formulate an implementation strategy. For that purpose, the then Ministry of Transport and Communications (MOTC) had engaged consultants who prepared a useful and comprehensive concept for the introduction of ITS. Against this background, the Government is proposing to examine the scope for fine-tuning and adapting the preliminary concept to Kazakh conditions.

4. In line with the above objective, the Ministry of Investment and Development, which substitutes the previous MOTC, has been tasked to create an ITS based single platform for monitoring and coordination of transport infrastructure as well as for providing timely information to on the prevailing traffic condition to travelers.

II. Objective and Scope of Work

5. The main objective is to design a system that will be effective under the distinctive operating conditions in Kazakhstan. To this end, the consultants will review previous studies including, but not limited to, concept prepared by the previous team of consultants and provide feasible solutions that can be practically adopted in the country. Specifically, the scope of work will cover:

- (i) Development of a single platform system including the required regulatory frameworks.

- (ii) Define the required sub-systems and possible outcomes;
- (iii) Estimation of financing needs including financing recommendations, notably the adoption of user charges and other cost-recovery mechanisms;
- (iv) Development of industry standards and other normative documents;
- (v) Implementation arrangements for the establishment of a national ITS, including the state approval;
- (vi) Introduction of a single platform for National ITS management and essential subsystems tested through a pilot project; and
- (vii) Staff training.

III. Detailed Terms of Reference

A. Development of a single architecture of ITS as well as required regulatory frameworks

6. The consultant will be required to conduct a pre-project survey which will clarify the goals and objectives, composition and scope of work in subsequent design, implementation and introduction of the national ITS. A single architecture of the national ITS will be developed based on the results of pre-project survey. Experience of foreign countries and international standards organization, i.e. ISO/TC204 in the application of ITS should be considered when designing the architecture of the entire system and its individual components, taking into account specifics of transport complex development in Kazakhstan.

7. The consultant will produce a report that will outline the subsystems required within the framework of a single ITS architecture and propose options and related results of subsequent implementation. All specified information should be presented in a form of a report, which should highlight the following:

- (i) The current state and main problems of the Kazakhstan transport sector;
- (ii) The current state of information and communication technology (ICT) infrastructure in Kazakhstan to be implemented to a framework of ITS architecture
- (iii) priority areas for the development and implementation of a national ITS;
- (iv) recommendations on optimization of existing and introduction of new business processes;
- (v) detailed description of each subsystem, its implementation goals and objectives;
- (vi) necessary organizational and technical support; and
- (vii) process of interaction with other subsystems.

B. Financing needs and sources of financing

8. The consultants will estimate cost and financing needs based on the proposed technical solutions. In estimating the cost and financing, the following specific factor shall be considered:

- (i) Purchase of licensed software; procurement of services for project management;
- (ii) procurement of services for development and implementation of application software;
- (iii) procurement of services for utilization of ICT infrastructure such as mobile telecommunication networks in Kazakhstan to be developed and implemented in ITS services for improving cost effectiveness

- (iv) procurement of services for the development of legal and technical documentation;
- (v) procurement of services for pre- and certification of the system for compliance with information security requirements;
- (vi) comparative evaluation of funding sources;
- (vii) assessment of suitable user charges as a means for cost recovery and project self-financing; and
- (viii) evaluation of the scope for private sector involvement in the financing of certain sub-systems.

C. Development of industry and other normative documents

9. Based on results of the pre-project survey, the list of standards and technical documents (draft standards and legal acts, technical regulations, rules of interaction, etc.) necessary for successful implementation of the project should be prepared. Based on this list, legal, regulatory, and technical documents should be drafted and subject to a review by legal experts in the view of current legislation of Kazakhstan. All legal and technical documentation should be developed in accordance with the legislation of the Republic of Kazakhstan and existing international standards, acts and treaties.

D. Implementation arrangements for the establishment of a national ITS, including obtaining state expertise approval

10. Based on results of the pre-project survey and the definition of a single architecture of for a national ITS, the consultant will determine the feasibility of the proposed creation of the National ITS. The consultants shall ensure that the approach and methodology adopted for the study comply with the standards of the state expertise commission and are consistent with the legislation of the Republic of Kazakhstan. The preparation of the feasibility study will allow for the required approvals of final design decisions, as well as requirements for the development and purchase of licensed software. The feasibility study should be prepared for all subsystems, except for sub-systems to be implemented under a pilot project

E. ITS Platform and implementation of pilot project

11. The ITS platform should provide a mechanism for collecting and analyzing information from a variety of subsystems, and facilitate automated and automatic decisions, in responses to changes in the prevailing transport condition. As such, the platform should provide a comprehensive set of tools and hardware which combines data sources and operating procedures into a single comprehensive platform for monitoring, managing, and ensuring operational sustainability and safety.

12. The platform will include a single component for modeling, forecasting, and managing processes and procedures on all roads of national importance. The process control system will allow for an automated routine standard regulatory procedure for handling situations in a form of a set of systematic instructions to operators or responsible persons, and monitoring the quality of procedures execution. A library of business processes is expected to be formed, and regularly updated and improved based on the approved regulations.

13. A pilot project will be carried out to test the effectiveness of the proposed single platform and its essential components. The following subsystems (but not limited to) shall be implemented under the pilot project:

- (i) **Collection of weather condition data.** Deployment of weather stations is suggested that will allow collecting data on ambient temperature, wind speed, road surface condition (ice, snow cover thickness, etc.), and visibility.
- (ii) **Roadway surveillance and driver advisory system** will involve introduction of traffic management subsystem that enable swift reaction to changing weather and other conditions on the roads. Signs and radio warning systems will be deployed allowing to adjust (impose restrictions for) speed limit during traffic accidents and/or on icy roads. In addition, the subsystem will monitor the work on road maintenance. The subsystem will also inform travelers about the current

traffic conditions and obstacles, including accidents, emergencies, or imposed restrictions.

- (iii) **A passenger movement counting subsystem** will keep track of travelers and passenger movement on all modes of transport in order to avoid and prevent terrorist acts and other illegal actions in transport. This subsystem will allow transferring data on passengers to law enforcement authorities, where passengers can be screened.

F. Staff training

14. Staff of the envisaged executing and implementing agencies (the client) will be trained and provided with the manual. Materials must be developed in Kazakh, Russian and English. Users should be empowered to use, modify, and maintain databases, and software components independently upon completion of the contract with the consultant. All educational and training materials will remain the intellectual property of the client. The client reserves the right to amend the materials. Training may be conducted either by the consultant or by a suitable subcontractor. In the course of training, the Consultant must evaluate the effectiveness of the training. Based on the assessed effectiveness, the consultant shall review the curriculum and conduct refresher training as required.

IV. Expected Outputs and Outcomes

A. Outputs

15. The Consultant shall provide the Client with monthly progress reports on project implementation. The following specific outputs will be delivered in the English and Russian languages as hard copies and e-files:

- (i) Survey report (interim and final);
- (ii) report on cost estimates, financing sources, and cost recovery;
- (iii) draft legal, and technical documentation;
- (iv) feasibility study and project implementation plan, reviews by concerned state authorities and state expertise conclusions;
- (v) implementation plans for all sub-systems and technical documentation;
- (vi) implementation plans of ICT infrastructure in Kazakhstan to all sub-systems
- (vii) implementation plan of pilot project;
- (viii) user and administrator's manuals and instructions, and interaction procedures; and
- (ix) workshops and certified training activities.

B. Outcomes

16. The proposed ITS is expected to generate the following outcomes:

- (i) increased safety;
- (ii) improved operational performance, particularly by reducing congestion;
- (iii) enhanced mobility and convenience;
- (iv) improved cost effective system development and deployment by utilizing ICT infrastructure;
- (v) environmental benefits; and
- (vi) increased productivity, employment, and economic growth.

V. Implementation

17. The consulting services will be provided by teams of international and national experts. International experts will provide leadership to the project and provide technical support and legal aspects with regard to ITS and the proper choice of design options and their application. To complete the tasks, 6 international experts will be required for a total of 67 person-months, and 6 national consultants for a total of 18 months.

18. The services described in the scope of work and TOR will be completed within 12 months from the date of mobilizing the team of consultants.

19. The MIID will act as the Executive Agency. Taking into account the key role of MIID in developing a single policy in the transport industry, the consultants should closely coordinate activities in these areas with the MIID. The project will also involve stakeholders represented by state bodies, organizations subordinate to the MIID, and other industry bodies. A Steering Committee led by MIID and consisting of all major stakeholders will be created to ensure efficient and effective interaction between the Consultants and the Client.

VI. Inputs

20. The team of Consultants will at a minimum consist of the following international staff to be deployed intermittently for the duration of the project:

Table 1: Minimum Consultant Team Composition

Team Member	Minimum qualifications / education / experience
1. Team Leader / ITS Specialist (12 months)	Experience in developing intelligent transport systems (ITS), road safety, road and traffic management with recommendations in Europe and Asia. Desirable qualifications - Master's degree with minimum 15 years international work experience, Certified Road Safety Auditors.
2. Senior Traffic Engineer in ITS, Deputy Team Leader (12 months)	Experience in developing ITS, road and traffic management engineering gained in Europe and Asia. Desirable qualifications - Master's degree with minimum 12 years work international experience.
3. Specialist on intelligent transport systems (12 months)	Experience in ITS development. Desirable qualifications - Bachelor's degree with minimum 10 years work experience
4. ITS Architect/Developer (12 months)	Experience in the design of ITS and their individual components. Desirable qualifications - Bachelor's degree with minimum 10 years work experience
5. Software Development specialist (12 months)	Experience in developing software for transportation industry. Desirable qualifications - Bachelor's degree with minimum 10years work experience
6. Transport economist and finance specialist. (7 months)	Experience in transport planning, including ITS. Desirable qualifications - Master's degree with minimum of 10 years international work experience
The national experts, will assist the relevant International Experts and share the scope of work assigned to them respectively. In addition to relevant professional experience of 5 years, the qualifications of the respective national experts also include the following: (i) familiarity with MIID transport and traffic systems, and communication setup in Kazakhstan; (ii) preferred work experience in ITS development projects with international organizations; and (iii) knowledge of English.	

VII. Cost and Financing

21. The cost of the consulting services is estimated at **\$4.4 million**, including remuneration of international and national experts, per diems, airfares, and other travel expenses and excluding taxes. Table 2 below shows a breakdown of the cost.

Table 2: Cost Estimates^a

ITEM		TOTAL COST (\$'000)
1.	Consultants	
	a. Remuneration and Per Diem	
	(i). International Consultants	2,000.00
	(ii).Local Consultants	500.00
	(iii).Other costs	50.00
	b. International and Local travel	100.00
	c. Reports and Communications	40.00
2.	Equipment	990.00
3.	Training, seminars and conferences	200.00
4.	Surveys	50.00
5.	Miscellaneous Administration and Support Costs	20.00
6.	Contingencies	450.00
Subtotal		4, 400.00

^a The project cost estimates will be finalized before the start of the projects.

Draft Terms of Reference for Project Management Consultant

I. Background

1. The CAREC Corridors 1 and 6 Connector Road (Aktobe–Makat) Reconstruction Project of the Government of the Republic of Kazakhstan (the Government) through its Ministry of Industry and Infrastructure Development (MIID) will improve the 473-kilometer roads in Atyrau and Aktobe Oblasts. This investment program will result to an efficient transport network connecting Atyrau to Aktobe (Aktobe oblast), and eventually, an increased national economic growth and regional trade.

2. The Asian Development Bank and Islamic Development Bank finance this investment program will comprise physical investments for upgrading roads and border infrastructure and facilities, and nonphysical investments for institutional capacity development, which includes project preparation, project management, asset management.

3. The physical investment includes the following road sections:

Road Section	No. of Km	Type of pavement	Technical Road Category
Sections financed by IDB			
Km 11-52	41.0	Asphalt concrete	Category I
Km 52-100	48.0	Asphalt concrete	Category I
Km 100-160	60.0	Asphalt concrete	Category II
Sections financed by ADB			
Km 160-220	60.0	Asphalt concrete	Category II
Km 236-275	39.0	Asphalt concrete	Category II
Km 275-330	55.0	Asphalt concrete	Category II
Km 330-370	40.0	Asphalt concrete	Category II
Km 370-418	48.0	Asphalt concrete	Category II
Km 418-458	40.0	Asphalt concrete	Category II
Km 487-504	17.0	Asphalt concrete	Category II

Note: Civil works procurement will follow international competitive bidding procedure.

II. Scope of Services

4. MIID requires the services of the Project Management Consultant (PMC) to manage the implementation of the investment program under the direct supervision of the Project Director (MIID). PMC will ensure (i) quality outputs and timely completion, within budget, of projects under PMC scope, (ii) compliance of each project with the loan covenants, (iii) compliance of all civil works contracts with FIDIC conditions and specific provisions in the loan agreement, and (iv) compliance with its consultancy services agreement with MIID.

5. PMC's specific tasks will include, but not be limited to the following:

a. Project Management

1. Planning

- (i) Set-up procedure in implementing, monitoring, evaluating and reporting of progress (including issues, if any);
- (ii) Prepare detailed implementation schedule with inputs from Project Director and construction supervision consultants (CSCs);

- (iii) Set-up coordination procedure among PMC experts, and with CSCs and MIID/Committee for Roads (COR) staff, Mangistau Oblast Departments;
- (iv) Develop procedure for site supervision and quality control;
- (v) Establish grievance redress system;
- (vi) Set-up financial management procedure;
- (vii) Establish a project performance monitoring system (PPMS);
- (viii) Set-up system in organizing, retrieving, and storing project documents; and
- (ix) Prepare timelines for report submission to ADB and IDB.

ii. Executing, Monitoring, and Controlling

- (x) Ensure that the systems and procedures (in items I to viii) are in place. If not operational, revise;
- (xi) Monitor the day-to-day progress of project implementation, and regularly report to the Project Director;
- (xii) Visit project sites and monitor performance progress vis-à-vis implementation schedule and against unexpected issues (e.g., environmental);
- (xiii) Undertake all civil works procurement and consultant recruitment activities following ADB Guidelines (see para. 8);
- (xiv) Update implementation status of the loan covenants;
- (xv) Review justifications for proposed variation orders submitted by the contractors and consultant;
- (xvi) Review and approve traffic control plans prepared by CSC and Contractor, and ensure that plans comply with all applicable road safety standards, guidelines and regulations;
- (xvii) Prepare withdrawal applications for payments and monitor disbursements against projections;
- (xviii) Conduct road safety audit when the sections are open, and discuss with the Project Director and resolve any road safety issue
- (xix) Collect baseline data for the PPMS, measure the indicators (output, outcome, impact) over time during implementation period, and incorporate findings in the project completion report;
- (xx) Prepare all reports indicated in Section III;
- (xxi) Maintain all project records;
- (xxii) Coordinate and supervise the work of the Supervision Consultant's field teams in supervising and certifying construction in accordance with contract condition
- (xxiii) Prepare project completion report;
- (xxiv) Preparation of materials for project meetings; and
- (xxv) Administer the projects strictly following the contractors' contract conditions.

b. Procurement of Civil Works and Recruitment of Consultants

- (i) Review bill of quantities vis-à-vis technical specifications as developed for procurement of works;
- (ii) Coordinate all activities in procuring civil works and recruiting consultant following ADB Guidelines and procurement plan;
- (iii) Post advance procurement notice (APN), invitation for bids (IFB), and consulting services recruitment notice (CSRN) on ADB and MIID websites²⁴ ;

²⁴ For civil works, also advertise it in English language newspaper of general circulation in Kazakhstan, or an internationally known and freely accessible website in English.

- (iv) Prepare bid documents and bid evaluation report for Project Director's endorsement before requesting ADB approval;
- (v) Prepare consultant terms of reference, request for proposal, and submission 1—5 documents for Project Director's endorsement before requesting ADB approval;
- (vi) Ensure timely signing of all contracts;
- (vii) Regularly update the procurement plan until contract awarding, in consultation with the Project Director and ADB, to reflect the progress and actual project implementation needs;
- (viii) Assess procurement and recruitment activities;
- (ix) Maintain all records on civil works procurement and consultant recruitment, with separate record on complaints and their redressing;
- (x) Train MIID staff on procurement; and
- (xi) Administer contracts to ensure compliance with the contract provisions, payment terms, variations, dispute resolution, and monitoring, etc.

III. Deliverables

6. PMC will submit the following reports in English and Russian (or Kazakh):

- (i) **Inception Report.** PMC will submit an initial report within 2 months after commencement to present the overall approach in managing the project, including implementation schedule and setting-up of systems and procedures (e.g., financial accounting, grievance redress, PPMS).
- (ii) **Bidding Document and Bid Evaluation Report.** PMC will prepare and submit the bidding documents and bid evaluation report subject to Project Director's endorsement.
- (iii) **Civil Works Contract Completion Report.** PMC will submit this report within 28 days after receiving Application for obtaining taking-over certificate from contractor. The Report will include assessment on the contractor's performance vis-à-vis target quality outputs, schedule and budget, and compliance with the loan covenants and contract provisions.
- (iv) **Consultant Recruitment Submission Reports under Quality-Cost Based Selection (QCBS).** PMC will submit all 5 submission reports as required under QCBS procedure in recruiting consultant. Prior to the first submission, PMC will finalize the consultant's TOR.
- (v) **Monthly, Quarterly and Annual Progress Reports.** PMC will submit Monthly and Quarterly Progress Reports during the whole length of the Project. Format of these reports should be corrected if required by COR. Preparation of these reports should involve all PMC specialists. Monthly Progress Reports should include the (a) civil works progress vis-à-vis implementation schedule and output targets, (b) assignment progress of construction supervision consultants vis-à-vis work assignments, (c) disbursement update, and (d) issues/problems with planned actions or actions undertaken to resolve the issues/problems. Quarterly Progress Reports should include the following update (a) management and operations, (b) procurement and consulting services, (c) technical (project outputs, performance and quality), (c) financial (project cost and fund utilization and financial management), (d) safeguards (EMP and LAPR implementation and monitoring), (e) compliance with anti-corruption policy, and (f) compliance with loan covenants. Payment of PMC services is subject to acceptance of progress reports by COR management.

- (vi) **Social impact reports.** PMC will submit social impact reports of road constructions following the Land Acquisition and Resettlement Plan (LARP). If impact will be more than 10%, the report will propose mitigation measures.
- (vii) **Project completion report.** PMC will submit the project completion report following ADB format.

a. Experts Required

1. Personnel Schedule

7. MIID will select an international firm, in association with national consultants, to carry out the tasks in this TOR. The procedure in recruiting the Consultant will follow ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).

8. Consulting services require a total of 67 person-months of international experts and 264 person-months of national experts, and will take place in 4 years, and additional work of relevant specialists during defects liability period.

9. PMC will provide highly qualified professionals, supporting staff, and all necessary services required for the cost effective and timely completion of the consulting services. Below is the staffing requirement.

Table 1. PMC Personnel Schedule

Position	International Experts		National Experts	
	No.	Person-months	No.	Person-months
Highway Engineer (Team Leader)	1	38		
Contract/Procurement Specialist	1	13	2	41
Road Engineer (Deputy Team Leader)			1	38
Road Engineer			3	79
Environment safeguards Specialist	1	8	1	16
Social safeguards Specialist	1	8	1	16
Financial Management Specialist			3	74
Total	4	67	11	264

i. International Experts

(i) Highway Engineer/Team Leader (38 person-months)

10. The following qualifications and experience are preferred:

- (i) Licensed Civil Engineer with postgraduate in road engineering or associated fields;
- (ii) 15-year work experience in road construction, with 10-year experience in project management of road projects;
- (iii) Experience as a team leader of multidisciplinary and multinational teams for at least 3 road project assignments;
- (iv) Has proven track record of successfully completing assignments of similar nature
- (v) Familiarity with different international standards for road designing and construction (FIDIC);
- (vi) Extensive experience in claims management, dispute resolution in civil works contracts (roads);
- (vii) Experience in similar geographic areas

- (viii) English proficiency both written and verbal; and
 - (ix) Knowledge of locally spoken language (added advantage)
11. The expert will:
- (i) be responsible for the overall project management
 - (ii) ensure that all tasks in Section II are carried out, and all outputs in Section III are submitted on time and of high quality
 - (iii) regularly and directly report to the Project Director on the day-to-day supervising and monitoring of project activities
 - (iv) regularly meet with his team of international and national experts to discuss project progress, outputs due for submission, performance of contractors and consultants as well as subcontractors, different issues (contracts, design, social and environment, etc) and options to resolve issues
 - (v) coordinate with MOTC/COR staff and construction supervision consultants in all aspects of project administration
 - (vi) identify and manage project dependencies and critical path
 - (vii) ensure that the projects are completed with quality outputs, on time and within budget
12. The Team Leader will hold at least one meeting per month on the site for each contractor and consultant. He will visit the sites approximately 10% of his whole input.
- (ii) Contract /Procurement Specialist (13 person-months)**
13. The following qualifications and experience are preferred:
- (i) Professional procurement specialist with technical engineering background
 - (ii) 15-year experience in all facets of large and complex international procurement, including civil works, consultant evaluation and selection and contract administration in multilaterally-funded operations
 - (iii) experience in contract management of projects funded by international organizations
 - (iv) Experience in similar projects and geographic areas
 - (v) English proficiency both written and verbal
 - (vi) Knowledge of locally spoken language (added advantage)
14. The expert will:
- (i) prepare, finalize, and submit the draft bidding documents based on project detailed design and following ADB Procurement Guidelines. Coordinate and consolidate inputs from national experts (engineers) in finalizing the draft bidding documents;
 - (ii) prepare bid evaluation reports following ADB Guidelines on Bid Evaluation
 - (iii) prepare terms of reference for consultants and advertise consulting requirements following ADB Guidelines on the Use of Consultants (2013, as amended from time to time);
 - (iv) prepare all consultant recruitment submission reports following ADB Consulting Services Operations Manual and Project Administration Instructions (e.g., evaluation of firms' expression of interest, evaluation of technical proposals, evaluation of financial proposals and overall ranking);
 - (v) conduct pre-bid meetings, public opening of bids, public opening of financial proposals, contract negotiations, and other activities leading to awarding of contracts

- (vi) ensure that contracts comply with ADB guidelines and loan covenants as well as FIDIC conditions for civil works contracts;
- (vii) review and update project procurement plan to monitor bidding and consultant recruitment schedules, and timely submission of reports;
- (viii) manage all contracts;
- (ix) prepare and carry out training on procurement for MIID staff;
- (x) Review current contract terms and conditions ensure that they comply with FIDIC contract conditions, Kazakhstan laws and regulations, and ADB and IDB policies; and recommend amendments, if necessary;
- (xi) Assist team members, the Client, CSC and Contractors in interpreting contract terms and conditions;
- (xii) Evaluate or monitor contractor performance to determine necessity for amendments or extensions of contracts, and compliance to contractual obligations and prepare proposals for the Engineer to make decisions;
- (xiii) Review and endorse or reject requests for deviations from contract specifications and delivery schedules. Draft VO's or amendments to cover changes, if needed;
- (xiv) Analyze claims or complaints regarding terms, pricing or perceived breach occurring in performance of contracts and take appropriate action;
- (xv) Analyze claim/dispute resolution activities related to price escalation, as well as claims caused by delays related to right of way issues (if any), deficiencies in designs (if any), construction specifications and others and take appropriate action; and
- (xvi) Maintain and manage the database related to contract administration

(iii) Environment Safeguards Specialist (8 person-months)

15. The following qualifications and experience are preferred
- (i) Bachelor degree on environmental science;
 - (ii) 5-year experience in carrying out environment impact assessment and monitoring environment safeguards of road projects;
 - (iii) Familiarity with ADB environment safeguards policy;
 - (iv) Experience in similar projects and geographic areas;
 - (v) English proficiency both written and verbal; and
 - (vi) Knowledge of locally spoken language (added advantage)
16. The expert will regularly coordinate with the national Environment Specialist for environment impact monitoring activities. The expert will:
- (i) supervise EMPs implementation on PMC road sections;
 - (ii) prepare semi-annual environmental monitoring reports and inputs to quarterly progress reports;
 - (iii) ensure that civil works and consultant contracts contain provisions complying with the loan covenants on environment;
 - (iv) assist in developing the grievance redress system
 - (v) supervise and monitor Environment Management Plan (EMP) implementation for each road section;
 - (vi) assess compliance of contractors and consultant performance with environment provisions in their contracts, and report any violations with recommendations;
 - (vii) closely monitor the project sites against any unexpected environmental impacts;
 - (viii) set-up internal monitoring system on environmental issues and measures;
 - (ix) prepare environmental reports (bi-annual monitoring report, completion report), and provide inputs on EMP implementation status to PMC's quarterly progress

- reports;
- (x) discuss with key stakeholders the environment strategy and EMP, and coordinate with them in dealing and resolving environmental issues. Key stakeholders may include (i) community/civil society organizations, (ii) oblast and rayon bodies and inspections on environment protection, (iii) MOTC engineers and project designers, (iv) Ministry on Environment Protection, (v) consultants on environment protection, (vi) civil works contractors, and (vii) subcontractors executing works on environment protection;
 - (xi) assist in complaint handling and reporting for the project. Specifically:
 - record, and report all grievances and suggestions coming from public and assist the project in providing timely feedback to complainants;
 - prepare and regularly update a consolidated database of complaints/queries received from the public through the contractors, partner-NGOs and rayon akimats;
 - identify and alert the project management on complaints and emerging issues raised by various stakeholders;
 - prepare on a quarterly basis a summary in tabular form of the complaints received and status of the resolution of such complaints for inclusion in the quarterly progress report;
 - follow-up actions taken to address complaints received on the project;
 - use various means of providing timely and accurate information to complainants; and
 - develop and implement a plan to inform the community about the project and its grievance redress system
 - (xii) coordinate with the Community Liaison Specialists for issues related to resettlement and land acquisition;
 - (xiii) assess capacity of the client on environmental issues and protection;
 - (xiv) develop training programs on environment protection, and monitoring and evaluating impact of road projects; and
 - (xv) report to the Team Leader and Deputy Team Leader any environmental issues.

17. Environment Specialist will be located in Astana. He will visit the sites approximately 50% of his whole input.

(iv) Social safeguards specialist (8 person-months)

18. The following qualifications and experience are preferred
- (i) Bachelor degree in Social Sciences or related fields; a masteral degree is an advantage;
 - (ii) General experience on public policy and information disclosure, and experience working with nongovernment organizations or any community organizations
 - (iii) 5-year experience in coordinating wide-range stakeholder meetings in similar internationally-funded projects and/or complaint handling, preferably in transport projects;
 - (iv) Experience in similar projects and geographic areas;
 - (v) English proficiency both written and verbal; and
 - (vi) Knowledge of locally spoken language (added advantage).

19. The expert will regularly coordinate with the national Community Liaison Specialist for LARP implementation and monitoring activities. The expert will:

- (i) coordinate preparation and finalization of land acquisition and resettlement plan (LARP) following ADB's safeguards policy and Kazakhstan safeguards-related legislations;
- (ii) timely disclose LARP;
- (iii) ensure that civil works and consultant contracts contain provisions complying with the loan covenants on land acquisition and resettlement;
- (iv) assist in developing a grievance redress system;
- (v) develop communication strategy for project information following ADB disclosure policy and Kazakhstan legislations, and timely disclose all relevant information;
- (vi) prepare logistical arrangements and required documents for the conduct of meetings;
- (vii) prepare minutes of meetings in English and Russian;
- (viii) record and report to the Deputy Team Leader and Team Leader local complaints and follow-up on actions taken by the concerned parties to resolve them;
- (ix) develop, implement and document, with support from the construction supervision consultants, a public awareness campaign on the project and its grievance redress system;
- (x) maintain a grievance database, and prepare quarterly summary of complaints (including action taken and status) to be submitted to MIID and ADB; and
- (xi) coordinate with mass-media.

ii. National Experts

(i) Road Engineer/Deputy Team Leader (38 person-months)

20. The following qualifications and experience are preferred

- (i) Licensed Civil Engineer
- (ii) 10-year experience in road construction
- (iii) Extensive experience in flexible pavement designing and technical investigation, establishing QA/QC procedures, setting up laboratories, and mix designs and testing procedures.
- (iv) Experience with international organization (added advantage)
- (v) Knowledge of English (added advantage)

21. The expert will

- (i) regularly coordinate with and report to the Team Leader all on-site activities, work progress vis-à-vis implementation schedule, quality control monitoring, issue resolution, and contractors' compliance to contract provisions and technical specifications.
- (ii) oversee road construction works in the field, monitor schedule and construction progress, and supervise quality of construction work
- (iii) verify CSC's approved shop drawings and as-built-drawings
- (iv) verify CSC's review on pavement design, required equipment and materials, asphalt mixing methodology, safety protection, and required test work
- (v) ensure that CSC develops quality assurance system and quality control plan for provisions of asphalt concrete pavement
- (vi) monitor compliance of pavement construction activities with technical specifications and schedules, and carry out independent inspection on pavement quality

- (vii) advise the Team Leader on CSC's lapses, if any, in monitoring pavement quality and contractors' compliance or non-compliance with pavement design specifications and construction method
- (VIII) maintain records of pavement test works, and inspection reports

The Road Engineer (Deputy Team Leader) will be located in Astana City. He will visit the sites approximately 50% of all his inputs.

(ii) Road Engineer (3 experts of total 79 person-months)

22. The following qualifications and experience are preferred
- (i) Licensed Civil Engineer
 - (ii) 10-year experience in road construction
 - (iii) Extensive experience in flexible pavement designing and technical investigation, establishing QA/QC procedures, setting up laboratories, and mix designs and testing procedures.
 - (iv) Experience with international organization (added advantage)
 - (v) Knowledge of English (added advantage)
23. The expert will
- (i) regularly coordinate with and report to the Deputy Team Leader all on-site activities, work progress vis-à-vis implementation schedule, quality control monitoring, issue resolution, and contractors' compliance to contract provisions and technical specifications.
 - (ii) oversee road construction works in the field, monitor schedule and construction progress, and supervise quality of construction work
 - (iii) verify CSC's approved shop drawings and as-built-drawings
 - (iv) verify CSC's review on pavement design, required equipment and materials, asphalt mixing methodology, safety protection, and required test work
 - (v) ensure that CSC develops quality assurance system and quality control plan for provisions of asphalt concrete pavement
 - (vi) monitor compliance of pavement construction activities with technical specifications and schedules, and carry out independent inspection on pavement quality
 - (vii) maintain records of pavement test works, and inspection reports

The Road Engineer will be located in Astana City. He will visit the sites approximately 50% of all his inputs.

(iii) Procurement Specialists (29 person-months)

24. The following qualifications and experience are preferred
- (i) Professional procurement specialist
 - (ii) 3-year experience in procurement
 - (iii) Work experience in large construction projects, particularly roads
 - (iv) Work experience with international organizations (added advantage)
 - (v) Good in communication skills and ability to prepare reports in English and Russian (added advantage)

25. The experts will assist the COR to ensure that project procurement activities follow ADB Guidelines on Procurement and Use of Consultants. The Procurements specialist will be in the office of COR.

(iv) Environment Safeguards Specialist (16 person-months)

26. The following qualifications and experience are preferred
- (i) Bachelor degree on environmental science
 - (ii) 5-year experience in carrying out environment impact assessment and monitoring environment safeguards of road projects
 - (iii) Familiarity with ADB environment safeguards policy
 - (iv) Work experience with international organizations
 - (v) Proficiency in both written and spoken English, and ability to prepare report in English, Russian and Kazakh (added advantage)

The national expert will assist the **international Environment Specialist** to (i) verify EMPs implementation on PMC road sections in liaison with CSC environmental consultants, (ii) implement Grievance Redress Mechanism, (iii) ensure that EMP implementation follow ADB's environment policy and Kazakhstan environment-related legislations, and (iv) carry out all the tasks in para 14.

(v) Social Safeguards Specialist (16 person-months)

27. The national expert will assist the **international Community Liaison Specialist** to (i) ensure that LARP implementation follow ADB's safeguards policy and Kazakhstan safeguards-related legislations, and (ii) carry out all the tasks in para 18.

28. The following qualifications and experience are preferred
- (i) Bachelor degree in Social Sciences or related fields
 - (ii) General experience on public policy and information disclosure, and experience working with nongovernment organizations or any community organizations
 - (iii) 5-year experience in coordinating wide-range stakeholder meetings in similar internationally-funded projects and/or complaint handling, preferably in transport projects
 - (iv) Work experience with international organizations
 - (v) Good knowledge of cultural and social aspects of construction projects
 - (vi) Proficiency in both written and spoken English, and ability to prepare report on English, Russian and Kazakh (added advantage)

29. The national expert will assist the **international Community Liaison Specialist** to (i) ensure that LARP implementation follow ADB's safeguards policy and Kazakhstan safeguards-related legislations, and (ii) carry out all the tasks in para 18.

(vi) Financial Management Specialists (3 experts, total of 72 person-months)

The following qualifications and experience are preferred:

- (i) a certified accountant
- (ii) 5-year experience on financial management and accounting system either in international organization or in reputable auditing firm
- (iii) Work experience on financial management of road projects
- (iv) Experience with international organizations

- (v) Familiar with ADB's guidelines on financial reporting, audit and funds utilization.
 - (vi) Proficiency in information technology, including knowledge of word processing, database management, spreadsheet and presentation software.
 - (vii) Proficiency in both written and spoken English, and ability to prepare report on English, Russian and Kazakh (added advantage).
30. The expert will:
- (i) prepare disbursement projections of the project (by quarter) until project completion
 - (ii) prepare monthly disbursement schedule (list of withdrawal applications for payment), submit it to MIID Financial Specialist every 2nd day of the month, and maintain progress schedules and cash flow chart
 - (iii) prepare withdrawal applications to be verified by the MIID Financial Specialist, signed by MIID and MOF authorized signatories, and submit to ADB for payment processing
 - (iv) maintain an accounting record
 - (v) prepare monthly financial reports report, including analysis of disbursement level vis-à-vis contract amount and progress outputs of contractor and consultant
 - (vi) ensure compliance with project financial management requirements
 - (vii) Check for compliance CSC invoices, keep balance on residual sums on CSC contracts;
 - (viii) develop a training program on financial management, accounting and reporting
 - (ix) report any financial issues to the Deputy Team Leader and Team Leader.
31. The MIID Financial Specialist will supervise all financial management specialists.
- (vii) Contract specialist (12 person-months)**
32. The following qualifications and experience are preferred:
- (i) Professional procurement specialist with technical engineering background
 - (ii) 3-year experience in contract management of projects funded by international organizations
 - (iii) English proficiency both written and verbal
 - (iv) Knowledge of locally spoken language (added advantage)
33. The expert will:
- (i) Contract specialist will closely work with international contract/procurement specialist.
 - (ii) Review current contract terms and conditions ensure that they comply with FIDIC contract conditions, Kazakhstan laws and regulations, and ADB and IDB policies; and recommend amendments, if necessary;
 - (iii) Assist international contract specialist in interpreting contract terms and conditions;
 - (iv) Review and endorse or reject requests for deviations from contract specifications and delivery schedules. Draft VO's or amendments to cover changes, if needed;
 - (v) Analyze claims or complaints regarding terms, pricing or perceived breach occurring in performance of contracts and propose the appropriate action;
 - (vi) Analyze claim/dispute resolution activities related to price escalation, as well as claims caused by delays related to right of way issues (if any), deficiencies in designs (if any), construction specifications and others and take appropriate action;

- (vii) Maintain and manage the database related to contract administration.

b. Other Information

1. Work schedule

34. PMC will commence its services in June 2016, in 1 month after contract signing. This month is the time when PMC is to mobilize its staff. Duration of services (38 months) is tentative and, if necessary, can be extended (both on volume and duration).

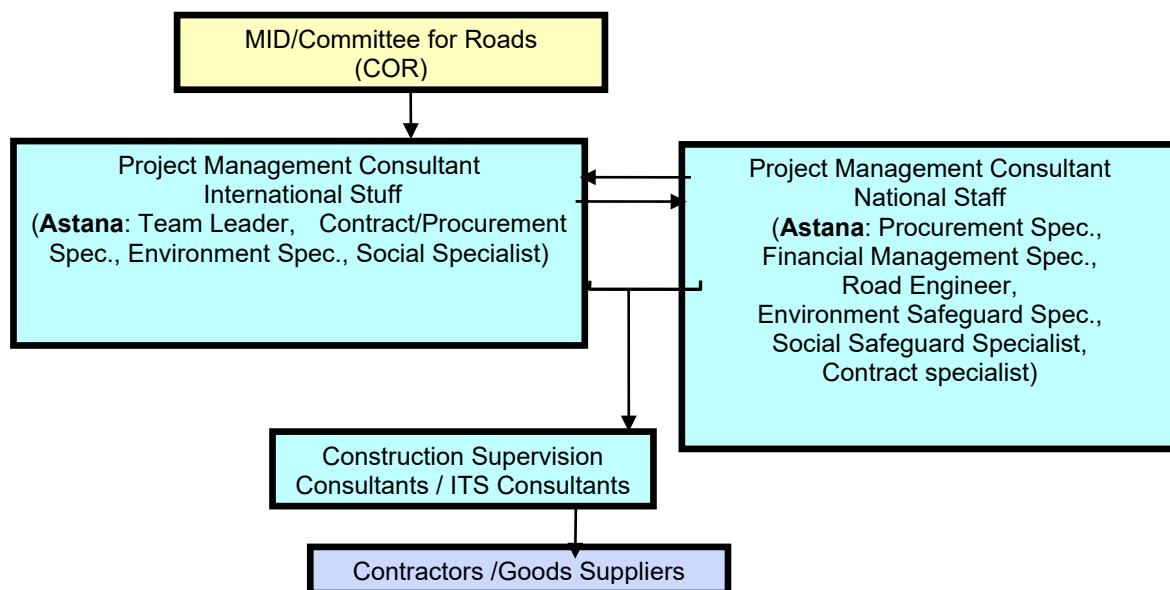
35. Implementation Arrangements

36. MIID is the executing agency (EA) for the Investment Program with the COR under MIID as the implementing agency. COR appointed a Project Director who has the overall responsibility in implementing the Investment Program.

37. PMC will report directly to the Project Director, and coordinate with the MOTC staff assigned for the projects' engineering, finance, legal and procurement matters. PMC through its Deputy Team Leader will also coordinate with the MCOR.

38. PMC will supervise and monitor the activities and outputs of the construction supervision consultants on sites. A construction supervision consultant will be hired for each project, as the Project Engineer, to supervise civil works construction and administer FIDIC contracts.

39. The Team Leader, Procurement Specialist (international and national), Environment Specialist (international), Community Liaison Specialist (international), Road Engineer (local) and local financial management specialist (national) will be located in Astana while international Deputy Team Leader, Community Liaison Specialist and rest national experts will be located in Aktau. The organizational structure is as follows:



2. PMC Performance Evaluation

40. COR will assess PMC's performance every quarter based on the following criteria:

Table 3: Work Performance Efficiency of PMC Personnel

Criteria (Rating from 1-bad to 5-excellent or N/A if not applicable)	Team Leader	Deputy Team Leader	Team of specialists	Project team
Professional competence				
• Professional skills and experience				
• Analytical capabilities				
• Innovation and taking up the risks				
• Technical training (quality of education)				
Management of project/assignment				
• Team Management				
• Planning and fulfilling of tasks				
• Respective practical experience				
Collaboration with CR				
• Emphasis on creating a team				
• Collaboration with CR management				
• Work coordination with different concerned parties				
Communications skills				
• Ability to listen				
• Ability to speak convincingly				
Enterprise				
• Initiative and pursuit to achieve results				
• Adaptability				
Comments on scores - 1 or 2				

41. If PMC performance is not satisfactory, then COR can demand (i) immediate corrective measures as there would not be enough time and resources to eliminate any defects in project management, (ii) replacement of key PMC personnel as needed within one month from notification date, or (iii) termination of the contract following ADB procedure after all measures have been exhausted.

42. COR will submit an official report on PMC performance assessment for COR management approval and ADB consideration. The report will contain evaluation of the performance and recommendations. The first report will be presented within 15 days after PMC submitted the draft initial report.

Bi-annual Environmental Monitoring Report

Project Number: {XXXXXX}
{Month Year}

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

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

For {Executing agency}
{Implementing agency}

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

TABLE OF CONTENTS

Part I Introduction

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

Part II Environmental Monitoring

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

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

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

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

Part III Environmental Management

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

Annexes

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

Reference	Requirement	Action to Date	Action Required/Comment

PROGRESS REPORT TEMPLATES

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

Monthly Project Progress Report
LXXX-KAZ:

I. Summary

- Overall implementation progress of the project

II. Civil Works

A. Package 1: XXXX

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

III. Consultants

IV. Other Matters

Quarterly Project Progress Report

Loan Number:

Reporting Period: Quarter ____ 20__

Kazakhstan: CAREC Corridors 1 and 6 Connector Road (Aktobe–Makat) Reconstruction Project
(RRP KAZ 48424)

Prepared by:

Committee of Roads of Ministry of Industry and Infrastructure Development, Government of
Kazakhstan

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

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 - B. Performance of Contractors, consultants, Borrower, MIID and ADB
 - C. Project Schedule
 - D. Project Monitoring and Review
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- VII. SECTOR REFORM AND ANTICORRUPTION POLICY IMPLEMENTATION
 - A. Sector Reform
 - B. Anticorruption Policy Implementation
- VIII. OTHERS

Attachments

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

BASIC DATA

Loan Identification

Loan Number
 Project Title
 Borrower
 Executing Agency
 Implementing Agency
 Amount of Loan

Loan Data

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

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

Project Components	Project Costs and Financing Plan		
	ADB	Gov't	Total
Civil Works			
Consulting Services			
Total			

km = kilometer, pm = person-month.

I. SUMMARY: IMPLEMENTATION PROGRESS

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

I. MANAGEMENT AND OPERATIONS

A. Implementation Arrangements

- (i) Assess the adequacy of implementation arrangements (such as establishment, staffing, and funding of the project implementing office) to deliver project outputs for the quarter.
- (ii) Discuss any major changes in the arrangements, and the effects on project implementation progress.
- (iii) Provide the status of compliance to related grant covenants on implementation arrangements. Indicate whether covenants were (i) complied with, (ii) late complied with, (iii) ongoing, or (iv) not complied with. If compliance was delayed or breached, discuss the reasons and impact, and whether the covenant was realistic. Discuss the impact of partial or noncompliance of covenants on project performance. Recommend ways to achieve compliance. Indicate if any covenant has been modified, suspended, or waived, and the justification for such action.

B. Performance of Contractors, Consultants, Borrower, Ministry of Transport, and ADB

1. Contractors and Consultants

2. Describe the performance of contractors and consultants for the quarter under reporting. If they did not perform exceptionally well, describe the effects on the delivery and quality of the outputs, schedule, and/or costs.

2. Borrower and Ministry of Transport

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

3. ADB

3. Review ADB's part in project implementation for the quarter (e.g., approvals, disbursements, and monitoring) to determine whether any ADB failure to act promptly, or disagreements with the borrower or executing agency on terms of reference, bid documents,

awards, or other matters affected the implementation procedures, project (program) costs, or implementation schedule.

C. Implementation Schedule

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

D. Project Monitoring, Review, and Reporting

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

II. PROCUREMENT AND CONSULTING SERVICES

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

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

III. TECHNICAL

A. Project Outputs

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

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

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

B. Project Performance and Quality

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

IV. FINANCIAL

A. Financial Plan

7. Discuss the financial achievements of the annual financing plan for the project during the quarter. The details should at least cover the following: (i) amount requested by the MOT for allocation in the annual budget; (ii) amount allocated under the annual budget; (iii) adequacy of allocation in terms of physical targets and latest cost estimate; (iv) utilization during the quarter under reporting; (v) utilization in the next quarter; (vi) forecast on utilization during the next quarter; and (vii) difficulties in getting the allocated amount released due to budgetary or other procedure, etc., if applicable.

B. Project Costs and Fund Utilization

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

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

C. Financial Management

- (i) Assess financial management capacity of the executing and implementing agencies.
- (ii) Assess whether ADB funds were not applied to the activities described on the [ADB Prohibited Investment Activities List](#) in Appendix 5 of the Safeguard Policy Statement (2009).
- (iii) Provide the status of compliance to related grant covenants on finance. Indicate whether covenants were (a) complied with, (b) late complied with, (c) ongoing, or (d) not complied with. If compliance was delayed or breached, discuss the reasons and impact, and whether the covenant was realistic. Discuss the impact of partial or noncompliance of covenants on project performance. Recommend ways to achieve compliance. Indicate if any covenant has been modified, suspended, or waived, and the justification for such action.
- (iv) Update table on Attachment 2.

V. SAFEGUARDS

A. Environment

- (i) Assess the progress of environmental management including measures for the mitigation of adverse environmental impacts in accordance with the environmental impact assessment; and update of environment management plan in Attachment 3.
- (ii) Review the environmental policies implementation associated with coal mines development in the region.
- (iii) Provide the status of compliance with related grant covenants on environment. Indicate whether covenants were (a) complied with, (b) late complied with, (c) ongoing, or (d) not complied with. If compliance was delayed or breached, discuss the reasons and impact, and whether the covenant was realistic. Discuss the impact of partial or noncompliance of covenants on project performance. Recommend ways to achieve compliance. Indicate if any covenant has been modified, suspended, or waived, and the justification for such action.

B. Resettlement

- (i) Assess progress of implementation of the resettlement plan, including salient achievements and problems faced and how these have been resolved.
- (ii) Provide status of compliance with related resettlement loan covenants. Indicate whether covenants were (a) complied with, (b) late complied with, (c) ongoing, or (d) not complied with. If compliance was delayed or breached, discuss the reasons and impact, and whether the covenant was realistic. Discuss the impact of partial or noncompliance of covenants on project performance. Recommend

ways to achieve compliance. Indicate if any covenant has been modified, suspended, or waived, and the justification for such action.

C. Labor, Gender, Health, and Social Protection

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

VI. OTHER MAJOR PROBLEMS AND ISSUES

9. Summarize other major problems and issues affecting or likely to affect implementation progress, compliance with covenants, and achievement of immediate development objectives. Recommend actions to overcome these problems and issues (e.g., changes in scope, changes in implementation arrangements, and reallocation of loan proceeds).