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Report No: 90027-TJ

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT
IN THE AMOUNT OF SDR 26.5 MILLION
(US$38.25 MILLION EQUIVALENT)
AND A

PROPOSED GRANT
IN THE AMOUNT OF SDR 4.7 MILLION
(US$6.75 MILLLION EQUIVALENT)

TO THE

REPUBLIC OF TAJIKISTAN

FOR THE SECOND PHASE (CARs-2) OF THE

CENTRAL ASIA ROAD LINKS (CARs) PROGRAM

February 2, 2015

Transport and Information and Communication Technology Global Practice
Central Asia Country Unit
Europe and Central Asia Region

CURRENCY EQUIVALENTS
(Exchange Rate Effective January 12, 2015)

Currency Unit = Tajikistani somoni (TJS)
TJS 5.14 = US$1
US$ 0.19 = TJS 1

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AADT	Average Annual Daily Traffic
ADB	Asian Development Bank
AI	Access to Information
BCP	Border Crossing Point
BOMCA	Border Management Programme in Central Asia
CAMP4CA	Climate Adaptation and Mitigation Program for Central Asia
CAREC	Central Asia Regional Economic Cooperation
CARs	Central Asia Road Links
CARs-1	The First Phase of the Central Asia Road Links Program
CARs-2	The Second Phase of the Central Asia Road Links Program
CBA	Cost-Benefit Analysis
CBTA	Cross-Border Transport Agreement
CGE	Computational General Equilibrium
CPS	Country Partnership Strategy
DA	Designated Account
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EDB	Eurasian Development Bank
EIA	Environmental Impact Assessment
EIRR	Economic Internal Rate of Return
EMP	Environmental Management Plan
EU	European Union
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft Für Internationale Zusammenarbeit GmbH
FM	Financial Management
HDM	Highway Development and Management Tool
ICB	International competitive bidding
IDA	International Development Association
IFR	Interim Financial Report

IMF	International Monetary Fund
IPF	Investment Project Financing
IRI	International Roughness Index
IsDB	Islamic Development Bank
JICA	Japan International Cooperation Agency
LSIS	Living Standards Improvement Strategy
M&E	Monitoring and Evaluation
MOT	Ministry of Transport
NBT	National Bank of Tajikistan
NCB	National Competitive Bidding
NPV	Net Present Value
NRRP	National Roads Rehabilitation Project
NSW	National Single Window
ORAF	Operational Risk Assessment Framework
OSCE	Organization for Security and Cooperation in Europe
PAD	Project Appraisal Document
PDO	Project Development Objective
PIG	Project Implementation Group
POM	Project Operational Manual
PR	Public Relations
RAP	Resettlement Action Plan
RIBS	Regional Improvement of Boarder Services
RPF	Resettlement Policy Framework
SDR	Special Drawing Rights
SNIP	Design Standards
SOE	Statement of Expenditures
SOP	Series of Projects
TOR	Terms of Reference
TRACECA	Transport Corridor Europe-Caucasus-Asia
TSCC	Transport Sector Coordinating Committee
UN	United Nations
WBG	World Bank Group
WTO	World Trade Organization

Regional Vice President:	Laura Tuck
Country Director:	Saroj Kumar Jha
Country Manager:	Patricia Veevers-Carter
Senior Global Practice Director:	Pierre Guislain
Practice Manager:	Juan Gaviria
Task Team Leader:	Cordula Rastogi

CENTRAL ASIA:
Central Asia Road Links – Republic of Tajikistan (CARs-2)

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Central Asia

Central Asia Road Links - Tajikistan (P145634)

PROJECT APPRAISAL DOCUMENT

EUROPE AND CENTRAL ASIA

ECCU8

Report No.: PAD1084

Basic Information		
Project ID	EA Category	Team Leader(s)
P145634	B - Partial Assessment	Cordula Rastogi
Lending Instrument	Fragile and/or Capacity Constraints [ ]	
Investment Project Financing	Financial Intermediaries [ ]	
	Series of Projects [ ]	
Project Implementation Start Date	Project Implementation End Date	
26-Feb-2015	15-Apr-2020	
Expected Effectiveness Date	Expected Closing Date	
30-Jun-2015	31-Aug-2020	
Joint IFC		
No		

Practice Manager/Manager	Senior Global Practice Director	Country Director	Regional Vice President
Juan Gaviria	Pierre Guislain	Saroj Kumar Jha	Laura Tuck

Borrower: Ministry of Finance			
Responsible Agency: Ministry of Transport			
Contact:	Sherali Ganjalzoda	Title:	First Deputy Minister
Telephone No.:	992-372211267	Email:	info@mintrans.tj mtrt-invest.dep@mail.ru

Project Financing Data(in USD Million)					
[ ]	Loan	[X]	IDA Grant	[ ]	Guarantee
[X]	Credit	[ ]	Grant	[ ]	Other

Total Project Cost:	54.00	Total Bank Financing:	45.00
Financing Gap:	0.00		

Financing Source	Amount
BORROWER/RECIPIENT	9.00
International Development Association (IDA) - Credit	38.25
International Development Association (IDA) - Grant	6.75
Total	54.00

Expected Disbursements (in USD Million)

Fiscal Year	2016	2017	2018	2019	2020					
Annual	3.00	5.00	10.00	12.00	15.00					
Cumulative	3.00	8.00	18.00	30.00	45.00					

Institutional Data

Practice Area (Lead)

Transport & ICT

Contributing Practice Areas

Trade and Competitiveness

Cross Cutting Areas

[ ] Climate Change
[ ] Fragile, Conflict & Violence
[ ] Gender
[ ] Jobs
[ ] Public Private Partnership

Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Transportation	Rural and Inter-Urban Roads and Highways	90		
Public Administration, Law, and Justice	Public administration-Transportation	10		
Total		100		

☑ I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.

Themes

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Trade and integration	Trade facilitation and market access	40

Rural development	Rural services and infrastructure	40
Trade and integration	Regional integration	20
Total		100

Proposed Development Objective(s)

The Central Asia Road Links (CARs) program has the overall development objective to increase transport connectivity between neighboring countries in Central Asia along priority cross-border road links and to support improvements in road operations and asset management practices. The program is the result of a collaborative effort initiated by respective governments in the Central Asia region which has been developed as a regional, multi-phase program considered as a regional project under IDA16 and IDA 17 with substantial transformational impact.

The project development objective (PDO) of the Second Phase of the Central Asia Road Links Program (CARs-2) is to increase transport connectivity between the Republic of Tajikistan and neighboring countries along priority cross-border road links in Sugd Oblast and to support improvements in road operations and asset management practices. The road sections to be financed under CARs-2 prioritize connectivity between Sugd Oblast in Tajikistan with Batken and Osh Oblasts in the Kyrgyz Republic and Ferghana Oblast in Uzbekistan.

Components

Component Name	**Cost (USD Millions)**
Rehabilitation of priority road sections in the Sugd Oblast	51.00
Improvement of Road Operations and Asset Management Practices	2.00
Project Management and Implementation	1.00

Compliance

Policy

Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [X]
Does the project require any waivers of Bank policies?	Yes [ ]	No [X]
Have these been approved by Bank management?	Yes [ ]	No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [X]
Does the project meet the Regional criteria for readiness for implementation?	Yes [X]	No [ ]

Safeguard Policies Triggered by the Project	**Yes**	**No**
Environmental Assessment OP/BP 4.01	**x**	
Natural Habitats OP/BP 4.04		**x**
Forests OP/BP 4.36		**x**
Pest Management OP 4.09		**x**
Physical Cultural Resources OP/BP 4.11		**x**
Indigenous Peoples OP/BP 4.10		**x**

Involuntary Resettlement OP/BP 4.12	**x**	
Safety of Dams OP/BP 4.37		**x**
Projects on International Waterways OP/BP 7.50		**x**
Projects in Disputed Areas OP/BP 7.60		**x**

Conditions

Source Of Fund	Name	Type
IDA	Contract for installation and adaptation of 1C Accounting Software signed	Effectiveness

Description of Condition

The Recipient has signed the contract for installation and adaptation of 1C accounting software for project accounting, budgeting and reporting has been signed and the Recipient has made provisions for adequate training on the new accounting system for the effective use by its accounting staff and the FM consultant.

Source Of Fund	Name	Type
IDA	Cross-effectiveness condition of Financing Agreement (Grant)	Effectiveness

Description of Condition

The execution and delivery of the Financing Agreements (Grant) on behalf of the Recipient has been duly authorized or ratified by all necessary governmental action and all conditions precedent to its effectiveness or to the right of the Recipient to make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled.

Source Of Fund	Name	Type
IDA	Cross-effectiveness condition of Financing Agreement (Credit)	Effectiveness

Description of Condition

The execution and delivery of the Financing Agreements (Credit) on behalf of the Recipient has been duly authorized or ratified by all necessary governmental action and all conditions precedent to its effectiveness or to the right of the Recipient to make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled.

Source Of Fund	Name	Type
IDA	Contract with FM consultant signed	Effectiveness

Description of Condition

The Recipient has signed the contract for recruitment of a financial management consultant to support the Chief Accountant of the MoT in implementation of this project.

Source Of Fund	Name	Type
IDA	Disbursement Condition	Disbursement

Description of Condition

Prior to the commencement of any works under the project, prepare an Environmental Management Plan and a Resettlement Action Plan in accordance with the Financing Agreement and acceptable to the Bank.

Team Composition

Bank Staff

Name	Role	Title	Unit
Cordula Rastogi	Team Leader (ADM Responsible)	Senior Transport Economist	GTCDR
Natalia Robalino	Counsel	Senior Counsel	LEGIA
Niso Bazidova	Financial Management Specialist	Financial Management Analyst	GGODR
Dilshod Karimova	Procurement Specialist	Procurement Specialist	GGODR
Asli Gurkan	Safeguards Specialist	Social Development Specialist	GSURR
Alexei Slenzak	Safeguards Specialist	Senior Environmental Specialist	GENDR
Jasna Mestnik	Team Member	Finance Officer	WFALA
Farzona Mukhitdinova	Team Member	Consultant	GFADR
Aidai Bayalieva	Team Member	Consultant	GTIDR
Bobojon Yatimov	Team Member	Senior Rural Development Specialist	GFADR
Artan Guxho	Team Member	Senior Infrastructure Specialist	GTIDR
Rodrigo Archondo-Callao	Team Member	Sr Highway Engineer	GTIDR
Christina Katharina Busch	Team Member	E T Consultant	GTCDR
Zhanetta Baidolotova	Team Member	Program Assistant	ECCKG
Funda Canli	Team Member	Program Assistant	GTIDR
Shahlo Norova	Team Member	Program Assistant	ECCTJ
Shoira Zukhurova	Team Member	Program Assistant	ECCTJ
Cynthia Abidin-Saurman	Team Member	Program Assistant	GTCDR

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments
Tajikistan	Viloyati Sughd	Viloyati Sughd	**X**		

I. STRATEGIC CONTEXT

A. Regional Context and Sectoral Aspects

1. **The Central Asia region, including the Republics of Tajikistan, Kazakhstan, Kyrgyzstan, Turkmenistan and Uzbekistan, is undergoing a rapid transformation**. Since the early 2000s, economic growth in the five republics has been fueled by strong exports in response to robust global commodity demand and prices as well as remittances reflecting strong growth in Russia. The share of agriculture as percentage of GDP is relatively high in the Republic of Tajikistan and the Kyrgyz Republic, the smaller countries of the region. In the past 20 years, the economic gap between the five Central Asian Republics, which was already significant in 1990, has widened further. GDP per capita in the Republic of Tajikistan and the Kyrgyz Republic in 1990 amounted to 30.1 and 36.9 percent of the GDP per capita in Kazakhstan in the same year. In 2011, the Republic of Tajikistan's GDP as a portion of the region's GDP dropped from 5.7 percent in 1990 to 2.4 percent in 2011, and GDP per capita in the Kyrgyz Republic was 9.9 percent of that of Kazakhstan's, according to official statistics.

2. **In the region, the Republic of Tajikistan[1] and the Kyrgyz Republic are considered the most remote and poorest where in 2011 about 36 percent and 37 percent respectively of the population lived below the poverty line, with a GDP per capita of US$1,037 and US$1,263 (2013) respectively**. Both countries lack exploited natural resources such as oil and gas, but have reportedly substantial potential in hydropower development and mineral resources. Lack of resources, a challenging regional context and a difficult business environment is preventing the countries from exploiting this potential. Sustainable growth and a diversified export base will require better human, physical and institutional capital. While strong demand and prices for commodities have supported growth in the region so far, diversifying the "assets base" in the region will be critical to the diversification of the economies. This will require improvements in the quality of infrastructure, institutions and service delivery, as well as better human capital.[2]

3. **Notwithstanding the widening gap in economic development between countries, the Governments in the region face similar development challenges to connect peripheral areas with regional and global economic centers of activities**. In part, this can be attributed to the impacts of the breakup of the Former Soviet Union which formerly shaped important features of the transport networks through a unified economic and transport complex built without consideration for administrative borders. Nowadays, there is a need to address access to shifting global markets, increasing trade integration with neighboring countries, and growing urban and rural disparities. This trend is reflected in greater labor migration from rural areas due to lack of employment opportunities, hindering the development of those areas. Analysis of the poor in the region also indicates that the concentration of poverty lies in marginal geographical areas characterized by lack of transport connectivity.

4. **At the core of these challenges is the need to rebuild a regional framework of connectivity that links population centers and economic hubs across borders in the Central Asia region,** in particular in the highly populated Fergana Valley where more than 10 million

[1] Poverty estimates for Tajikistan for 1999, 2003, 2007 and 2009 are based on Living Standards Surveys (LSS) and data for 2012 on Tajikistan's Household Budget Survey (HBS). Thus, due to different design and implementation protocols, the earlier (TLSS) and most recent (HBS) data are not strictly comparable.

[2] World Bank (2014), Diversified Development. Making the Most of Natural Resources in Eurasia. World Bank Group. Washington, DC.

people reside, or 31 percent of the Republic of Tajikistan's, 51 percent of the Kyrgyz Republic's and 27 percent of Uzbekistan's population. Relatively small investments in cross-border transport links are proven to have a higher impact than the simple economic value added from reduced transportation costs. However, this will only be achieved if reforms in other areas are addressed, including trade facilitation, non-tariff barriers and the like which poses a high risk towards achievement of the project.

5. **Logistics costs in the region are already very high in an international comparison, accounting for about 18-23 percent of exported value and 16-18 percent of imported value according to a recent study**.[3] These high values greatly impact trade, the competitiveness of domestic products as well as the potential for economic diversification due to the rise of costs of inputs and costs of exports. While railways are the backbone for a connectivity solution of the region to regional and international markets, the share of road transport in overall traffic flows has been continually increasing. This is particularly true for short-distance (and at times even for longer distance) and intra-regional movements, especially in countries such as the Republic of Tajikistan where road transport is often the only option given the alpine topography and small rail network. It is also favored for time-sensitive items such as fruits and vegetables, textiles and clothing and other consumer goods, which constitute a large share of the region's non-oil sector. Passenger transport in the region is almost exclusively done by cars and buses and served only to some extent by air and railways due to the very difficult terrain.[4]

6. **This agenda is also at the core of the support intended by the World Bank and other development partners to the governments of the Central Asia region** (see Annex 9). Support towards these objectives has been underway for several years, for example investments in transport infrastructure and upgrades of energy systems and networks. Efforts to rehabilitate six strategic transport corridors in the Central Asia region have been spelled out in the on-going Transport and Trade Facilitation Strategy and Action Plan for 2008-2017 and endorsed by Central Asia Regional Economic Cooperation (CAREC). Within CAREC, medium-term priority projects in the transport sector to be implemented during the period from 2011 to 2015 have obtained confirmed financing in the amount of US$15.5 billion from development partners and governments. Additionally, within the framework of CAREC, the countries, including the Republic of Tajikistan are currently working together on improving cross-border trade facilitation under the Asian Development Bank (ADB)-financed Regional Improvement of Border Services (RIBS) Project (approved in April 2013). Within this project, the national single window is being developed in addition to the upgrade of infrastructure and customs procedures at selected border crossing points, including the ones targeted by the proposed project. Coordination meetings between development partners are and will continue to be undertaken on a regular basis.

B. Country Context

7. **Landlocked, largely mountainous, with a population of 8.2 million and a GNI per capita of US$990 in 2013 (Atlas methodology), the Republic of Tajikistan is not only the poorest country in the Europe and Central Asia region**. Tajikistan is Central Asia's least accessible, most isolated country, with only limited regional and international connectivity. This is

[3] World Bank (2013), Road Transport and Logistics Providers in Central Asia: Kazakhstan, Kyrgyz Republic and Tajikistan. World Bank Group. Washington, DC.

[4] The Bank is currently preparing a Sector Policy Note and a Regional Railway Study with focus on road and rail interfaces.

partly a function of the country's geography and topography: internal and regional communications and transportation are problematic, especially in winter. It is also due to regional trade and transit obstacles. The Republic of Tajikistan depends on external trade for its development, and its export-driven business in agriculture and industry requires fast, reliable and economically affordable transport. The Republic of Tajikistan's economic performance has been impressive in recent years, with an annual GDP (US$8.51 billion in 2013) and growth averaging over 7 percent annually during 2010-2013, and poverty level decreased from 72 percent in 2003 to 47percent in 2009 and, based on more recent, albeit not exactly comparable survey data, to about 36 percent in 2012/2013.[5]

C. Sectoral and Institutional Context

8. **Rehabilitating and managing the country's transport infrastructure poses particular challenges due to geography and limited international connectivity**. The Government of the Republic of Tajikistan puts highest priority towards improving transport connectivity at the national and regional level with a view to transform peripheral regions into the core of new economic neighborhoods, including China and Afghanistan. Severely constrained by the predominantly alpine topography, travel within the country is mostly done by road. The total length of the country's road network is 26,776 km, including 14,067 km under the Ministry of Transport (MoT), or 52.5 percent of total network. The roads under MoT's responsibility include about 5,300 km of international and national roads and about 8,700 km of rural roads. The State Program on Transport Sector Development 2010-2025 addresses all aspects of the transport sector, in particular asset management (see Annex 7).

9. **Improvements in road operations and asset management practices are slowly being introduced, but much remains to be done**. Overloading of trucks is a major problem in the Republic of Tajikistan, increasing road deterioration and overall transportation costs. MoT is currently in the process of reviewing the rules, regulations and standards of axle load control which are currently enforced by the State Service on Control and Regulation with around 287 staff (out of which 47 are in the central office). The State Service uses mobile scales located at borders posts and at its regional offices to enforce current regulations and a ban of travelling during the day has been issued for overloaded trucks with some limited results. The scales available in the country are old and require the vehicles to stop for the control of weight and inspection. An upgrade of the existing axle-load-control system is planned with the introduction of weight-in-motion technology which is expected to eliminate as much as possible the "human factor". To improve asset management and spend limited resources allocated towards maintenance of rehabilitated road sections, MoT is also in the process of creating a modern road database as well as IT hardware and software. This requires additional resources towards the development of procedures as well as a set of equipment to evaluate the network data at project or network level.

10. **Trade facilitation, customs modernization and border management improvements are important areas under development with support from several developing partners**, including ADB and the European Union (EU). The speedy adoption of a National Single Window environment is seen as a key initiative to allow improved levels of trade facilitation, supported by the on-going ADB-financed RIBs project as well as technical assistance provided by the German Federal Ministry for Economic Cooperation and Development through the Deutsche

[5] The World Bank, World Development Indicators, 2014.

Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH[6]. At present, there is sufficient excess (physical and resource) capacity currently at regional border crossing points that would allow for an increase in traffic volumes, particularly transit, without impacting on existing operational resource allocation of border agencies. Existing clearance processes are generally consistent with regional practice and minimum international convention obligations, however with a high degree of physical interventions in cross-border movements. Those initiatives are linked with on-going investments in the road network along the north-south axis (Nijniy-Pyandj-Dushanbe-Khujand-Chanak road, including the completion of Shahristan and Istiklol tunnels), as well as the east-west axis (Tursunzade-Dushanbe-Karamik road) as well as other links of national and regional importance (such as Ayni-Panjakent, Kurgonteppa-Kulob). Strengthening intermodal linkages (road-rail) have not yet been addressed with the existing investments (see Annex 8).

D. Higher Level Objectives to which the Program and Project Contributes

11. **The proposed Central Asia Road Links (CARs) Program complements the on-going efforts of the countries in the region described in the on-going Transport and Trade Facilitation Strategy and Action Plan for 2008-2017** which is endorsed by CAREC. This strategy foresees the rehabilitation of six strategic transport corridors in the Central Asia region based on their impact on economic growth and poverty reduction as highlighted by the recently development framework for the CAREC program 2011-2020 (CAREC 2020). The program has the aim to expand trade and improve competitiveness by developing "economic corridors" as well as improve trade facilitation. Within the trade facilitation component, cross-border transport agreements (CBTAs) between the Republic of Tajikistan, the Kyrgyz Republic and Afghanistan are being developed and implemented to ensure smooth flow of goods and people.

12. **The recently approved Country Partnership Strategy (CPS) between the Government of the Republic of Tajikistan and the World Bank for the period of FY15-18 recognizes regional connectivity as one of the pillars for the World Bank Group Program in the country** and includes actions that would allow assessing and accelerating cross-border transport, increasing efficiency, reducing costs, and facilitating regional and international trade. While all countries participating in the program would benefit from rehabilitation of the proposed road links connecting people and regional economic centers across borders, the proposed second phase of the Central Asia Road Links Program (CARs-2) would also support private sector growth enabling opportunities for cross-border trade. Focused on Sugd Oblast, which accounts for about one quarter of Tajikistan's GDP and 40 percent of the country's overall freight turnover, CARs-2 would not only facilitate economic and regional cooperation, but also support private sector participation and the World Bank Group[7]'s agro-processing strategy for time-sensitive products, such as fruits and vegetables, clothing and textiles, and other consumer goods.

13. **Proposed project interventions are to contribute to the facilitation of trade between the Republic of Tajikistan and neighboring countries** (Kyrgyz Republic and Uzbekistan) and improve attractiveness of the Republic of Tajikistan as a country favorable for transit. In 2014, the Republic of Tajikistan was only ranked 188 out of 189 countries on the Doing Business

[6] http://www.giz.de/en/downloads/giz2012-regional-economic-cooperation-central-asia-en.pdf

[7] The World Bank Group consists of the International Bank for Reconstruction and Development, the International Development Association, the International Finance Corporation and the Multilateral Investment Guarantee Agency.

"Trading across borders" indicator.[8] As for the Logistics Performance Index, the Republic of Tajikistan in 2014 ranked 114th out of 160 countries for logistics performance.[9] Data from the World Bank/IFC Enterprise Surveys show that customs clearing times for both imports and exports in Tajikistan in 2013 were about 50 percent higher than in Eastern Europe and Central Asia as a region (imports: 8.8 vs. 5.9; exports: 6.8 vs. 4.4 days).[10] The same survey showed the percentage of firms identifying transportation as a major constraint to be higher in Tajikistan (12.4 percent) than in Eastern Europe & Central Asia (10.4 percent).

14. **The proposed project is also aligned with the Living Standards Improvement Strategy (LSIS) for 2013-2015, which recognizes transport connectivity as one of the objectives among public administration and governance; private sector-led growth; development of human potential; energy independence and food security**. Transport connectivity is also one of the key development objectives of the socio-economic development program of Sugd region up to 2015. In this connection, the year 2014 was announced as a year of "Better roads in Sugd Oblast" by the Authority of Sugd Oblast and this initiative was supported by the MoT and other stakeholders at the local and municipal level.

15. **The CARs Program aims at promoting shared prosperity and reducing extreme poverty, the twin goals in the WBG strategy.** Improved transport connectivity raises prosperity in the region by making trade and production sharing more efficient, developing larger regional value chains, and tapping into economies of scale. This will lead to important social and economic outcomes in those underserved regions where the program road links are located. At present, inadequate transport links in poor rural areas such as Sugd region compound peoples' social and economic isolation. The program will contribute to unlocking the region's potential in participating in commerce and supply chains, notably in the areas of producing agricultural products marketable to urban areas or in the agro-industry. Additionally, the road links targeted by the program are important trade and transit routes of further regional and local importance as indicated by the high traffic volumes (5,000-10,000 average annual daily traffic, AADT) experienced on the main sections of the route between Khujand and Osh. Adjacent CARs-2 road links count about 2,800 AADT.

II. PROGRAM AND PROJECT DEVELOPMENT OBJECTIVES

A. The Program Objective

16. The Central Asia Road Links (CARs) program has the overall development objective to increase transport connectivity between neighboring countries in Central Asia along priority cross-border road links and to support improvements in road operations and asset management practices. The program is the result of a collaborative effort initiated by respective governments in the Central Asia region which has been developed as a regional, multi-phase program under IDA16 and IDA 17. The proposed program is considered to have transformational development outcome. Overall program performance and results (program-level indicators) will be measured by aggregating the following project-level indicators of each phase: (i) volume of freight through border crossing point increased by at least 10 percent, (ii) market accessibility index improved and (iii) number of roads rehabilitated.

[8] The World Bank, Doing Business Report 2014, www.doingbusiness.org
[9] The World Bank, Logistics Performance Index 2014, http://lpi.worldbank.org/
[10] The World Bank/ International Finance Corporation 2014, www.enterprisesurveys.org

B. The Project Development Objective and Key Indicators of CARs-2

17. The project development objective (PDO) of the Second Phase of the Central Asia Road Links Program (CARs-2) is to increase transport connectivity between the Republic of Tajikistan and neighboring countries along priority cross-border road links in Sugd Oblast and to support improvements in road operations and asset management practices. The road sections to be financed under CARs-2 prioritize connectivity between Sugd Oblast in Tajikistan with Batken and Osh Oblasts in the Kyrgyz Republic and Ferghana Oblast in Uzbekistan.[11] The road sections to be financed under CARs-2 prioritize connectivity between the Sugd Oblast in Tajikistan and the Osh and Batken Oblasts in the Kyrgyz Republic as they build lateral spurs from the Khujand-Osh axis to the Kyrgyz border (see Annex 9, Map).

C. Project Beneficiaries

18. **The beneficiaries of the project will include the mobile population along the road corridor from Kanibadam to Isfara and from Khujand to Proletarsk and onwards**, representing passengers, haulers, traders from neighboring countries, and the immobile population, employees in supportive business and their families, residents along the road sections, tradable sectors of the economy and ultimately, consumers and producers both inside and outside the subregion. The project will directly benefit about 2.4 million residents of Sugd Oblast who are expected to be regular road users travelling along the road sections.[12] Sugd Oblast has above average poverty headcount.

19. **The percentage of females on the total direct beneficiary population is 50 percent (1.2 million) and the percent of urban population is 30 percent**. While women and men will equally benefit from the project investments, citizen engagement and beneficiary consultations will be held during project implementation in order to facilitate evaluation of gender impacts as has been done during project preparation. Additionally, a communications strategy and a specific survey on beneficiary feedback (with the use of mobile phones) are being developed partly with input from civil society organizations as part of citizen engagement activities during project implementation (financed out of component 3). Broader indirect benefits are estimated to affect more than three million residents of the Republic of Tajikistan and the Kyrgyz Republic who might benefit from the improved connectivity.[13]

D. PDO Level Results Indicators

20. **To measure the results of the project, several project intermediate and outcome indicators have been agreed upon (see Annex 1).** The indicators relating to the connectivity component of the PDO are: (i) volume of freight through Guliston/Kyzyl-Bel, Madaniyat/Kairagach and Patar border crossing points, and (ii) market accessibility index of Sugd Oblast. The indicators related to sustainability of road operations and asset management practices

[11] CARs-1, complementary to CARs-2 in its investments of cross-border links as well as institutional development aspects became effective on December 14, 2014 (see paragraph 30 below).

[12] As presented in the economic analysis, most of the direct economic benefits to beneficiaries results from a reduction of vehicle operating costs (85 percent of total benefits).

[13] Through participatory consultations, communities in the project area have emphasized to the Bank team and government that inadequate transport links compounds their social isolation. It was voiced that the rehabilitation of the road links will (i) greatly improve their access to administrative and commercial centers and markets (Khujand, Batken and Osh), and (ii) provide them with greater employment and income opportunities. Communities stressed the high transportation costs which reportedly take up to about one third of their household expenditures due in part to the poor quality of roads.

will be tracked during project implementation, including: (i) satisfaction of road users (beneficiaries) with the improvements along completed road sections, (ii) approval by MoT and presentation at regional level (CAREC) of a Strategic Plan on weight and axle load control, and (iii) Road asset management system in operation for analysis and planning of road works.

21. **The achievements of the overall program could be measured through a regional analysis of the wider economic impacts of the phases of the program**. As such, it would be more than just the sum of each phase and could be designed based on the methodology pioneered under the economic analysis for each phase (see Annex 5). At this stage, a project-specific baseline and impact evaluation for CARs-2 is proposed to be carried out using financing from the project proceeds (component 1). Citizen engagement activities are being financed as well under a separate consultancy (component 3).

III. PROJECT AND PROGRAM DESCRIPTION

A. Project Components

22. **The components of the CARs-2 will include the following components** (a more detailed description of the components is provided in Annex 2):

23. ***Component 1: Rehabilitation of Priority Road Sections in Sugd Oblast (estimated total cost up to US$51.00 million out of which IDA financing of US$42.00 million)*:** The component is expected to finance the provision of works and consultants' services for the rehabilitation of approximately 70 kilometers of road sections in Sugd Oblast. These road sections will link the Republic of Tajikistan with its neighboring countries and include the following: (1) Kuckkak-Kim-Isfara-Guliston (BCP), (2) Dehmoi-Proletarsk-Madaniyat (BCP), including a link to the intermodal rail terminal in Proletarsk, and (3) Kanibadam-Patar (BCP) (see Annex 9, Map). These activities are expected to positively impact cross-border trade, improve market accessibility in Sugd Oblast as well as reduce road user costs along selected road links. The consultants' services for construction supervision will also include a baseline survey and analysis of the impact of the project interventions. The substantial risk in achieving this is mitigated by proper packaging of contracts, increased citizen engagement and communications with local communities as well as construction supervision by an internationally recruited consultant (see Annex 4). Related bidding documents and terms of reference have been prepared as drafts.

24. **The proposed road sections are expected to be built mainly based on local design standards of road category III (SNIP), with carriage-way width up to 12 m, respectively**. Provisional cost estimates include consultant services for construction supervision, as well as physical and price contingency. The rehabilitation and construction works of the priority sections would include: strengthening of road base course in particular/distressed sections, leveling and profiling of the existing layers with binder, including a new asphalt wearing course, drainage rehabilitation, repairs/replacement of bridges and structures, and installation of road safety equipment/signs. A road safety audit will be undertaken as part of the design work for the road sections. The project's preparatory studies included investigation of different alternative options as well as the integration with border crossing facilities.

25. ***Component 2: Improvement of Road Operations and Asset Management Practices (estimated total cost US$2.00 million, financed by IDA)*.** This component is proposed to finance the provision of goods, and consultants' services for the improvement of road operations and asset management practices. The improvement of road operations will include a review of tech-

nical standards, norms and parameters on vehicle (truck) weight, and axle load limits, and the development of an axle loading control plan to define the operation of a national axle load control strategy; and the financing of equipment to implement the axle loading control plan. To improve asset management practices in the road sector, the component will provide financing towards: (i) procurement of a roughness profiler; (ii) procurement and installation of around 40 permanent traffic count stations; (iii) support the adaptation of the road database to be used by the 62 maintenance units and financing the procurement of hardware and software development; and (iv) support to the deployment of a road asset management system within the MoT, by financing consultants' services to assist on the adaptation of the road database and the preparation of annual reports and a 5 year rolling plan of capital road works. In addition, the component will finance consultants' services to assist MoT on the preparation of a Transport Sector Development Strategy until 2050. These activities are expected to contribute to the reduction of the number of overloaded trucks in the Republic of Tajikistan, harmonize axle loading control in the region, and support evidence-based decision regarding road asset management and planning in the transport sector. The moderate risk to achieve this is mitigated by linking activities closely with the on-going efforts of the government (see Annex 4).

26. ***Component 3: Project Management and Implementation (estimated total cost US$1.00 million, financed by IDA).*** This component is expected to finance the provision of goods, consultants' services, and training, operating costs, including a financial audit to support project coordination, implementation, and management. The overall responsibility for the implementation of all activities under the project will lay with the MoT, including fiduciary and safeguards responsibility for project execution. To support the MoT in all aspects of project implementation, a Project Implementation Group (PIG) has been established by the MoT's Decree dated August 1, 2014. The MoT PIG will consist of a team of MoT staff assigned for the project and additional individual national consultants (see Annex 3), including (i) project coordinator, (ii) engineer, (iii) procurement specialist, (iv) financial management specialist, (v) disbursement specialist/cashier, (vi) safeguards and communications specialist, (vii) monitoring and evaluation (M&E) and public relations (PR) specialist, (viii) resident engineer/regional coordinator, as well as (ix) logistic support staff, including office manager and secretary/translators (see Annex 3). A Project Operational Manual has been prepared by MoT that describes the processes and procedures for project management and implementation.

B. Project Financing

27. **The lending instrument for CARs-2 in the Republic of Tajikistan is Investment Project Financing (IPF)**. The sources of funds for this IDA credit/grant come from national IDA allocation as well as regional IDA allocation made available in Special Drawing Rights (SDR). The national IDA financing is in the amount of US$15 million equivalent (45 percent grant and 55 percent credit) with a 6-year grace period and 38 years to maturity. The terms for regional IDA financing in the amount of US$30 million is on a 100 percent credit basis. The Government is expected to provide co-financing in the amount of US$9 million.

Table 1: Project Cost and Financing by Component for CARs-2[14]

Project Components	Total Project Costs (US$ M equivalent)	IDA Financing (US$ M equivalent)	Government co-financing (US$ M equivalent)	% Bank financing (exclusive of VAT, customs duties and fees)[15]
1. Rehabilitation of Priority Road Links in Sugd Oblast	51.00	42.00	9.00	83%
2. Improvement of Road Operations and Asset Management Practices	2.00	2.00	0.00	100%
3. Project Management and Implementation	1.00	1.00	0.00	100%
Total Project Costs	54.00	45.00	9.00	

C. Program Phases and Component (Series of Projects)

28. **This project is designed as part of a series of projects (SOP) (horizontal regional program) with multiple countries (borrowers)**. The program is horizontal in that not all countries would need to start at the same time, but rather each would begin when ready, through a series of sequential phases. The proposed project in the Republic of Tajikistan is the second phase in this program (CARs-2) since the country has demonstrated readiness in accordance with the triggers of the program, including: (i) a formal expression of interest to join the program; (ii) a program of activities designed to meet the PDO of the program; (iii) the preparation of detailed designs and related safeguards documents in form and substance acceptable to the Bank; and (iv) appraisal of the project by the World Bank. Those triggers have been developed based on experience of similar programs in other regions.

29. **This SOP is regional and interdependent in nature because no country can manage cross-border transport connectivity on its own**. The magnitude and complexity of problems transcend national boundaries and call for harmonization of investments, knowledge sharing and compatible policies towards better practice. The regional approach will help build synergies, enhance cross-border road links through a regional connectivity approach, provide tools for more effective policy dialogue and build closer collaboration within existing regional fora, such as CAREC. The advantage of the SOP instrument is that it allows the Bank to provide support in a flexible manner and it is well-suited to support long-term reform, with logical sequencing of activities, when individual countries have met the necessary triggers, and are ready for implementation. Each subsequent project in the SOP will be described in a separate Project Appraisal Document (PAD).

30. **Phase 1 of the program (CARs-1 in the Kyrgyz Republic) has become effective while Phase 3 is under discussion (see Annex 8)**. CARs-1 is financing the rehabilitation of priority cross-border road links that are adjacent (Batken Oblast) to the ones proposed to be financed under component 1 of CARs-2 (Sugd Oblast). Component 2 also have similarities as both projects (CARs-1 and CARs-2) are focusing on the improvement of road operations and asset manage-

[14] A detailed breakdown of activities and costs in the project is provided in Table 1 in Annex 2.
[15] The project is exempt from VAT, customs duties and fees. This is general practice in the country for all projects financed by external development partners. Project cost includes income taxes and social charges.

ment. Discussions are currently on-going between the Government of the Kyrgyz Republic and the Republic of Kazakhstan with a view to increase transport connectivity between the two countries in bordering Issyk-Kul Oblast (Kyrgyz Republic) with bordering Almaty Oblast (Republic of Kazakhstan). This may lead to the third phase, expected to be implemented during March 2016 and April 2022. Assuming at least three project phases the total investments needed are expected to total US$500 million out of which the required Bank financing is about one fourth.

31. **The CARs program meets the eligibility criteria contained in the Guidelines for IDA Regional Program Funding in IDA 17 as follows**: (i) the program involves a minimum of three contiguous economically interdependent countries (Republic of Tajikistan, Kyrgyz Republic and Republic of Kazakhstan); (ii) the expected welfare improvements (such as trade efficiency gains) cannot be fully achieved without the direct and integrated involvement of the countries in the program; (iii) the social and economic benefits spill over countries' boundaries and can only be achieved through the coordinated implementation of an integrated set of infrastructure and facilitation measures in the countries; and (iv) the operational establishment and mandated role of the CAREC indicates that there is a platform for regional policy harmonization with a high degree of country and regional ownership.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

32. **The participating countries of the program have agreed to use the existing regional coordination mechanism of CAREC** in order to ensure the achievement of the PDO. Regional coordination would be exercised at two levels: (i) policy level; and (ii) the operational level. At the policy level, the Transport Sector Coordinating Committee (TSCC) within CAREC would be the platform to discuss policy-related issues, such as the harmonization of standards, norms, and parameters on vehicle (truck) weight and axle load limits and tariffication. At the project's operational level, interactions between respective implementing agencies of the projects would be expected and supported through financing provided by the Bank on project management and implementation. This may include regular meetings between the implementing agencies to report on progress of physical investments.

33. **The overall responsibility for the implementation of all activities under CARs-2 will lay with the MoT**, including fiduciary responsibility for project execution. The PIG within the MoT will be responsible for day-to-day administration of project activities which include, *inter alia*: (i) the management of designated accounts; (ii) financial management and reporting on the overall project; (iii) ensuring the execution of the audit of the project; (iv) preparation of quarterly financial and bi-annual progress reports; (v) the management of the environmental and social safeguards aspects; and (vi) undertaking all procurement and contract management activities for all components.

34. **Staff of MoT has no prior experience with directly implementing World-Bank financed projects.** Other donor-financed projects are being implemented through a structure of separate Project Implementation Units (PIUs) specifically established for the project. The proposed implementation arrangement of the project is rated as substantial given the high risk country context as well as social tensions in the project area. Some of these risks will be mitigated by proper packaging of contracts, hiring of an internationally recruited supervision consultant for the civil works as well as consultants with prior experience on the implementation of donor-financed projects, in particular in areas of safeguards and fiduciary requirements.

B. Arrangements with Development Partners

35. **For the CARs-2, the Government has invited several development partners to consider financing alongside the World Bank, including the Japan International Cooperation Agency (JICA), the Eurasian Development Bank (EDB), and the Islamic Development Bank (IsDB)**. In this regard, the CARs-2 project is expected to contribute substantially to leveraging funds from those development partners as the IDA financing terms (grant element) allows the Government to attract non-concessional terms. It would build upon and physically connect to the on-going Bank-financed CARs-1 project in the Kyrgyz Republic. Adjacent road links for which the Government is seeking financing from other donors include several sections, in particular Khujand-Kanibadam as well as Kanibadam-Kim. The feasibility study estimates the costs related to the rehabilitation of those sections adjacent to project sites to be around US$100 million.

36. **Coordination, joint implementation support and monitoring as well as collective policy dialogue mechanisms have been discussed with the development partners**. During project preparation, efforts were made from the side of the World Bank to harmonize the set of criteria, guidelines and policies used for each project financed by individual development partners. The implementing agency however requested to use each financier's safeguards (most of which are similar to the World Bank safeguards policies) as well as fiduciary policies and guidelines. Coordination and cooperation during project implementation has been agreed upon between the development partners and the implementing agency.

C. Results Monitoring and Evaluation

37. **The project has designed and includes a set of monitoring indicators at the project level**. These indicators together with the monitoring and evaluation arrangements are detailed in Annex 1. The overall responsibility for monitoring and evaluation of outcomes of CARs-2 will formally lie with the MoT. MoT will prepare semi-annual progress reports, with contributions from other stakeholders, and forward these to IDA within 45 days from the end of the reporting period. These reports will detail physical progress and progress in respect of the monitoring indicators in the results framework (Annex 1). The reports will also contain a summary of the status of the implementation of the Environmental Management Plans (EMPs) and Resettlement Action Plans (RAPs) in respect of the improvement of the physical infrastructure.

D. Sustainability

38. **The government's commitment towards the rehabilitation of priority road links is a key determinant for the sustainability of the project**. This commitment is demonstrated by the highlighting of the project's importance in the LSIS for 2013-2015. The government has already embarked on the rehabilitation of adjacent road sections, including the north-south link between Khujand and Dushanbe and its extension to the border with Uzbekistan in Chanak (see Annex 9, Map). The second phase of the CARs program is designed to ensure sustainability of the investment through improved road structures, with timely and improved practices of asset management, and targeted traffic safety measures.

39. **The civil works to be implemented under the project are "climate proof" and take into account climate adaptation measures.** Soil erosion and landslides are significant problems in Tajikistan which could be accelerated by poor land management practices, such as the cultivation of land on steep slopes, excessive cutting of forests, shrubs and bushes including

wind shelters, overgrazing, and improper irrigation. As the project area is located at the edge of the Central Asian Fold Belt in the Tien Shan Mountain System, it is prone to natural hazards, including earthquakes, debris flow, flash floods, and land-slides. The engineering designs prepared include specific measures to protect against hazards. The project will also learn and contribute to the experience of the Bank-financed Climate Adaptation and Mitigation Program for Central Asia (CAMP4CA) which is currently under preparation.

V. KEY RISKS AND MITIGATION MEASURES

A. Risk Ratings Summary Table

Risk Category	Rating
Stakeholder Risk	High
Implementing Agency Risk	
- Capacity	Substantial
- Governance	High
Project Risk	
- Design	Moderate
- Social and Environmental	High
- Program and Donor	Low
- Delivery Monitoring and Sustainability	Substantial
Overall Implementation Risk	High

B. Overall Risk Rating Explanation

40. **The overall implementation risk of CARs-2 is rated as high** given the high risk country and stakeholder risk, relative volatile situation in the Fergana valley, recent social tensions along the border between the Kyrgyz Republic and the Republic of Tajikistan, and the fact that this is the first major intervention in the transport sector by the Bank. Agency risk is also assessed as substantial given that this is the first Bank-supported project in the transport sector in Tajikistan.[16] Although the project will mainly cover rehabilitation and upgrade of existing road sections and the social and environmental impacts will be predictable, localized and readily mitigated, there will be some land acquisition and resettlement associated with the bypass around Isfara. Due to scarcity of fertile land in Isfara district, the implementation of mitigation measures and compensation for project affected population has to be handled by MoT with diligence.

41. **The above risks are expected to be mitigated by several measures**, including (i) proper packaging of contracts, (ii) recruitment of a reputable construction supervision consultant, (iii) hiring of individual consultants with prior experience in donor-support projects to provide implementation support to MoT, (iv) development of various citizen engagement and communications activities (see II.C) as well as (v) increased implementation support by the Bank.

42. **The weighted risk profile for the CARs program in its entirety is rated substantial** as well given that it will be implemented by various countries and implementing agencies, in-

[16] The Operational Risk Assessment Framework (ORAF) for CARs-2 is presented in Annex 4.

cluding some post-conflict countries[17]. All countries share similar social, economic and political risks, and are placed on the top 2-15th percentile on Transparency International's Corruption Index.

VI. APPRAISAL SUMMARY

A. Economic Analysis

43. **An economic evaluation has been done using the Highway Development and Management Tool (HDM-4)**. The return on the investments is satisfactory with an overall Economic Internal Rate of Return (EIRR) of 16.7 percent, Net Present Value (NPV) of US$25.3 million at a discount rate of 12 percent, and Benefit Cost Ratio of 1.5. The EIRR of individual road sections varies from 12.8 to 26.8 percent. A severe worst case scenario with construction costs increased by 15 percent[18] and traffic growth rates benefits decreased by 15 percent still shows a reasonable return for the project with an EIRR of 13.9 percent. Switching values analysis shows that construction costs would have to increase by 47 percent for the project EIRR be reduced to 12 percent. Vehicle operating costs savings represent 90 percent of the project benefits, while travel time savings represent 10 percent.[19]

44. **The HDM-4 economic model used for the cost-benefit analysis provides estimates of transport savings for different categories of users**. The wider economic benefits from the project derive from other mechanism where changes in connectivity patterns increase the consumer welfare and enhance the production and trading patterns in the regions targeted by the project. The project is expected to have positive impact on the economy of the region and further promote the towns of Isfara, Kanibadam and Khujand as regional centers (including links through the airports located there), generating substantial road user cost savings and improve per capita income at the local and regional level. An estimate of the wider benefits from connectivity improvements has been implemented combining partial equilibrium and fixed effect gravity modeling[20] to estimate connectivity changes. These changes are related to changes in total logistics costs on the main links of the network which add to the savings on transportation costs estimated from HDM-4, the savings in value of time. The aggregate benefits on consumers and traders in the Sugd Oblast are estimated to represent between 1.8 and 2.5 percent of regional GNI.

B. Technical

45. **The Feasibility Study covered the investigation of several sections, within and around Kanibadam, Isfara and Khujand cities, including those leading to respective Border Crossing Points (BCPs)**. The draft results provided economic and technical assessments, and recommendations for sections suitable for financing under the project. The condition of the sections to be financed under the project are poor to very poor, with a roughness index (IRI) varying from 5 to 7, with extensive potholes, cracks, raveling, and edge breaks, which require an

[17] The term "post-conflict" in this context does not refer to the definition of "post-conflict" used by the Bank and defined as a country to be in or in transition from conflict by reference to the extent of: (i) human casualties; (ii) proportion of the population which is internally displaced; and (iii) the extent of physical destruction as set forth in the Bank's Operational Policy 2.30.

[18] Variation orders under the on-going Bank-financed National Roads Rehabilitation Project (NRRP) in the Kyrgyz Republic have not exceeded 15 percent of original engineer's estimates.

[19] See Annex 5 for results of economic analysis and sensitivity analysis.

[20] The model used is comparative static and does not capture structural changes brought by the improvement in connectivity.

immediate intervention. The adopted intervention strategy (to be reflected in the detailed designs) is based on the topographical and geotechnical surveys of the existing conditions and pavement deterioration, and investigation of different alternatives and consists of (i) reconstruction with removal of asphalt and placing of new bound and unbound pavement layers along existing alignment and (ii) new pavement construction along alignment. The designs of the project roads have also taken into consideration the integration of the rehabilitated sections accessing the border crossing facilities, according to their functional layouts. The inclusion of ducts for fiber optic cables is being considered by the design consultants.

46. **The detailed designs (for road capacity and geometry based on SNIP 2.05.02-85 (Roads and Highways[21]) take into account measures to address road safety.** A road safety audit has been undertaken as part of the design work for the road sections and its recommendations have been addressed, to ensure the safety of all road users, e.g., pedestrians, vulnerable groups and drivers. The recommendations include, among others: (i) the installing of warning/limiting and information signs at the approach of residential areas and junctions, including street lightning, wherever possible; (ii) use of the appropriate materials for road marking, to ensure night visibility and inform accordingly all road users, i.e.: pedestrian crossings, left turns, junctions with local/feeder roads, approaching to schools, markets and other areas providing public services, and (iii) location and relocation of bus stops at places that are safe and convenient for the community, vulnerable groups. In addition, an application for a grant from the Global Road Safety Facility is currently being prepared to provide additional assistance to MoT along road safety dimensions of education, enforcement and emergency response.

47. **The completion of the project will make a contribution to the improvement of road operations and asset management practices nationwide**. This will be achieved through the final operationalization of an asset management system as well as the development of axle load control systems. Weight-in-motion technology-based systems are planned to be installed at several locations on a pilot basis.

C. Financial Management

48. **The MoT would be responsible for overall implementation of the financial management** (FM) function of the project including, monitoring the flow and accountability of funds, budgeting, accounting, reporting, and auditing. To improve the financial management capacity the MoT has to install the automated accounting system, with inbuilt controls and capacity to generate interim unaudited financial reports (IFRs), and contract experienced financial management consultants to provide technical support to the Finance and Accounting Department of the MoT. The Chief Accountant of the MoT will be overall responsible for the financial management arrangements and the FM Consultant will be hired within PIG in order to support the Chief Accountant with maintaining adequate financial management arrangements.

49. **The current FM arrangements at the MoT do not meet the necessary FM and disbursement requirements** but upon meeting the following measures, the MoT will fully satisfy the Bank's fiduciary requirements: (i) finalize FM chapter of the Project Operational Manual (POM) to guide staff in daily project FM operations (MoT, already met); (ii) sign contract for installation and adaptation of the 1C accounting software for project accounting, budgeting and

[21] These criteria generally reflect the earlier former Soviet Union SNIP standards, but simplification has been introduced to eliminate the more excessive of the provisions contained in these earlier standards.

reporting (MoT, by effectiveness); and (iii) Contract with FM consultant in PIG has been signed (MoT, effectiveness condition).

50. **The MoT PIG is recommended to open the Designated Account (DA) in the National Bank of the Republic of Tajikistan (NBT) for the portion of grant/credit funds allocated to it.** Payments in local currency (Somoni) will be made through the treasury system. The ceiling for the DA and other disbursement details will be provided in the Disbursement Letters. The overall residual FM risk of the project was assessed as High now and is expected to become Substantial after implementation of the mitigation measures.

51. **The PIG will submit quarterly interim un-audited financial reports (IFRs) that will be generated by the respective accounting software based on formats agreed with the World Bank.** The reports, to include Statement of Sources and Uses of Funds, Uses of Funds by Project activities (Components & Expenditure Categories) and Statement of DA, will be submitted to the World Bank within 45 days of the end of each quarter, with the first reports under the proposed Project being submitted after the end of the first full quarter following initial disbursement. The formats of these IFRs have been agreed upon during negotiations.

52. **The PIG will submit the annual audited project financial statements within six months of the end of each fiscal year of the Client or within six months of the end of the disbursement deadline date.** Each such audit will include the project financial statements, Statement of Expenditures (SOEs) and DA Statement. The cost of the audit will be financed from the project funds. Following the Bank's formal receipt of the audited financial statements from the PIG, the Bank will make them available to the public in accordance with the Bank's Access to Information (AI) Policy through its website. In addition, the PIG will publish the audit reports in a manner acceptable to the Bank.

D. Procurement

53. **Procurement will be carried out in accordance with the World Bank's** "Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers" dated January 2011 and revised July 2014 and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers" dated January 2011 and revised July 2014, and provisions stipulated in the Financing Agreement. The World Bank Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credit and Grants dated October 15, 2006 and revised on January 2011, would also apply.

54. **An initial procurement plan has been prepared by MoT and reviewed by the World Bank team covering the procurement activities expected under the project components.** Thereafter, the procurement plan will be updated from time to time or at least once a year and each update will be subject to the Bank's prior review. The initial procurement plan and subsequent updates will be published on the Bank's external website in line with Bank's requirements.

55. **The MoT has the overall responsibility for procurement activities, while its PIG will carry out contract management activities**. The overall project risk for procurement is rated "high". After mitigation measures are implemented, the residual risk would be "substantial". The risks associated with procurement and mitigation measures were identified in the assessment of the agency's procurement capacity (see Annex 3).

E. Social (including Safeguards)

56. **Overall, the social benefits resulting from the project are expected to be significant**. The project will contribute to the reduction of the geographic, economic and social isolation of the Sugd Oblast and other part of the Fergana Valley from the rest of the country. The rehabilitated road sections have great potential to enable enhanced trade and economic links between the Kyrgyz, Uzbek and Tajik areas of the Fergana valley thereby contributing to social and economic integration of the region. This could be seen as a substantial social benefit which would help counter multi-dimensional fragility. The consultant for construction supervision (financed out of component 1) will be required to report indicators through their regular monitoring reports that are gender disaggregated, including key social and economic benefits that are expected to result from the project complementing the proposed impact assessment. The project will also consider other measures to support social and economic benefits during implementation, primarily through citizen engagement and beneficiary consultations (financed under a separate consultancy out of component 2). The RPF lays out the project-specific grievance redress mechanism procedures for CARs-2 in detail which do not only pertain to resettlement impacts but also issues/communities concerns linked to the project activities.

57. **The project triggers OP/BP 4.12 – Involuntary Resettlement due to land acquisition**. Impacts involve compensation for assets such as fences, trees and crops as well as the demolition and subsequent compensation for a small number of structures along the section between Kuchkak-Guliston and Dehmoy-Madaniyat. Some permanent acquisition of small private land parcels is needed along this section; at present, resettlement of occupied homes is not anticipated. The draft Resettlement Policy Framework (RPF) was disclosed in country on July 25, 2014 through MoT website (http://www.mintrans.tj/en) and at the Bank's Info Shop on August 1, 2014 and final RPF (dated August 25, 2014) on October 3, 2014. The RPF covers only the specific road segments financed by the Bank. Public consultations in Isfara and Proletarsk have been held on August 5-6, 2014. The draft abbreviated site-specific Resettlement Action Plans (RAPs) for Isfara bypass has been prepared by MOT and reviewed and approved by the Bank.

F. Environment (including Safeguards)

58. **The main adverse environmental and social impacts are site-specific and transient and relate to the proposed rehabilitation of priority road sections in the Republic of Tajikistan**. They include the following: (i) air pollution and noise from trucks and other construction machinery, and asphalt plants; (ii) soil disturbance during earthmoving and material (gravel/sand/soil) extraction; (iii) tree-cutting and loss of vegetation; (iv) generation and disposal of construction and household (from construction camps) solid waste; and (v) construction camp management (which will be temporary with only minor and localized negative effects).

59. **The project has been assigned the Environmental Category B – Partial Assessment**. Road rehabilitation will be undertaken within the existing right of way of the road and environmental impacts can thus be mitigated by good construction and housekeeping practices. The project triggers OP/BP 4.01 - Environmental Assessment. The draft site-specific Environmental Impact Assessment (EIA) has been disclosed by MoT on July 25, 2014 through MoT website ((http://www.mintrans.tj/en) and at the Bank's InfoShop on August 1, 2014 and consultations have been held. The final EIA (dated August 27, 2014) was disclosed on October 3, 2014. The EIA covers only the specific road segments financed by the Bank and includes a EMP template for the Environmental Management Plan (EMP). The EMP will be part of the civil works con-

tract and implementation will be monitored by the supervision consultants, MoT, the PIG, and the Bank team.

G. Other Safeguards Policies Triggered

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

60. **Approximately half of the border between the Republic of Tajikistan and the Kyrgyz Republic has not been officially demarcated.** Two bilateral commissions have been set up between the Republic of Tajikistan and the Kyrgyz Republic to resolve border issues as well as cross-border economic and cultural issues. The MoT heads the delegation of the Republic of Tajikistan on the commission dealing with border demarcation. There is no pending international litigation between the Republic of Tajikistan and the Kyrgyz Republic regarding border issues relevant to the project, nor is there conflicting legislation in the two countries that impacts the project on the issue of borders.

61. **Certain road sections to be financed by IDA are in close proximity to the border with the Kyrgyz Republic**. For the reasons referenced in the preceding paragraph, the project does not trigger OP/BP 7.60. Nevertheless, to ensure close coordination between the two Governments, the Government of the Republic of Tajikistan provided the proposed alignment to the Government of the Kyrgyz Republic. In a letter from the Kyrgyz Minister of Transport and Communications, the Government of the Kyrgyz Republic responded that it supports the proposed Bank-financed project linking Khujand and Osh through two transport routes and did not express reservations about the proposed alignment. The Government of the Republic of Tajikistan will inform the Government of the Kyrgyz Republic, local authorities and communities along the road alignment of the specific location of intended works before they begin. By supporting the proposed project, the Bank does not intend to prejudice the final determination of either party's claims to any lands in the project area.

62. **Recent social tensions along the border between the Kyrgyz Republic and the Republic of Tajikistan may adversely affect the implementation of the project**. Due to the situation in the project area, several activities have been agreed with MoT to increase communications about the project. In order to mitigate related risks, MoT and the Bank team have agreed upon a communications strategy and citizen engagement activities, such as frequent beneficiary surveys as well as communications about the objectives of the project, main activities, status of implementation and next steps. The implementation of these activities, led by MoT will be closely supervised by the Bank team's communications and social development specialist.

Annex 1: Results Framework and Monitoring

CENTRAL ASIA: Central Asia Road Links - Tajikistan (P145634)

Results Framework

Project Development Objectives

PDO Statement

The Central Asia Road Links (CARs) program has the overall development objective to increase transport connectivity between neighboring countries in Central Asia along priority cross-border road links and to support improvements in road operations and asset management practices. The program is the result of a collaborative effort initiated by respective governments in the Central Asia region which has been developed as a regional, multi-phase program considered as a regional project under IDA16 and IDA 17 with substantial transformational impact.

The project development objective (PDO) of the Second Phase of the Central Asia Road Links Program (CARs-2) is to increase transport connectivity between the Republic of Tajikistan and neighboring countries along priority cross-border road links in Sugd Oblast and to support improvements in road operations and asset management practices. The road sections to be financed under CARs-2 prioritize connectivity between Sugd Oblast in Tajikistan with Batken and Osh Oblasts in the Kyrgyz Republic and Ferghana Oblast in Uzbekistan.

These results are at | Project Level

Project Development Objective Indicators

		Cumulative Target Values					
Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Volume of freight through Guliston/Kyzyl-Bel and Madani-Madani-yat/Kairagach, Patar border crossing points (Number)	359,838.00	380,000.00	410,000.00	440,000.00	480,000.00	550,000.00	550,000.00

Market accessibility index of Sugd Oblast (Number)	4.50	4.50	4.50	4.50	4.50	5.00	5.00
Satisfaction of road users (beneficiaries) with the improvements along completed road sections (Percentage)	0.00	0.00	30.00	50.00	70.00	80.00	90.00
Approval by MoT and presentation at regional level (CAREC) of a Strategic Plan on weight and axle load control (Yes/No)	No	No	No	No	Yes	Yes	Yes
RAMS system is in operation for analysis and planning of road works (Yes/No)	No	No	No	No	Yes	Yes	Yes

Intermediate Results Indicators

		Cumulative Target Values					
Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Road user costs	0.57	0.57	0.57	0.57	0.57	0.47	0.47

by truck along the project road sections and in project area (US$/veh-km) (Number)							
Equipment for traffic count and road roughness measurement is used for popu-lating data in RAMS (Yes/No)	No	No	No	No	Yes	Yes	Yes
Long-term Transport Sector Development Strategy is de-veloped and en-dorsed (Yes/No)	No	No	No	Yes	Yes	Yes	Yes
Roads in good and fair condi-tion as a share of total classi-fied roads (Percentage) - (Core)	0.00	0.00	0.00	10.00	30.00	40.00	40.00
Size of the total classified net-work (Kilometers - Sub-Type: Sup-plemental) -	180.00	180.00	180.00	180.00	180.00	180.00	180.00

(Core)							
Roads rehabilitated, Non-rural (Kilometers) - (Core)	0.00	0.00	0.00	25.00	40.00	60.00	70.00
Direct project beneficiaries (Number) - (Core)	2,400,600.00	2,440,000.00	2,480,000.00	2,540,000.00	2,580,000.00	2,620,000.00	2,650,000.00
Female beneficiaries (Percentage - Sub-Type: Supplemental) - (Core)	1,197,899.00	1,220,000.00	1,240,000.00	1,260,000.00	1,280,000.00	1,300,000.00	1,320,000.00

Indicator Description

Project Development Objective Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Volume of freight through Guliston/Kyzyl-Bel and Madaniyat/Kairagach, Patar border crossing points	This indicator measures the annual total freight volume (import, export and transit) crossing Kyzyl-Bel/Guliston, Kairagach/Madaniyat and Patar border crossing points as recorded by the customs service of the Republic of Tajikistan in '000 tons.	annual	customs data, border service	MOT and its PIG
Market accessibility index of Sugd Oblast	Passengers component –This indicator measures the average market accessibility of Sugd Oblast, described as the sum of population of the selected major cities weighted by travel time to reach major markets. Major cities include Isfara, Kanibadam, and Khujand. Freight component – a freight component such as average travel times for a typical freight truck between Kanibadam to/from the Guliston/Kyzyl-Bel, from Dehmoy to/from Madniyat/Kairagach and from Kanibadam to/from Patar border control points	at the end of project	survey	MOT and its PIG
Satisfaction of road users (beneficiaries) with the improvements along completed road sections	This indicator measures the level of satisfaction with road system along completed road sections. Indicator covers a quality of road pavement, alignment, road markings and signs. Baseline is 0 given that no completed sections are available.	annually	road user surveys	MOT and its PIG (local firm to be contracted for data collection)
Approval by MoT and presentation at regional level (CAREC) of a Strategic	This indicator measures the actual approval of the strategic plan on weight and axle load control by MOT. It also reflects	at the end of project	project completion report	MOT and its PIG

Plan on weight and axle load control	whether the strategic plan was presented at the regional level, such as at a meeting of the Central Asia Regional Economic Co-operation.			
RAMS system is in operation for analysis and planning of road works	This indicates whether Road Asset Management System (RAMS), which is used for inventory, analysis and planning of road works, has been developed and installed at MOT.	at the end of the project	project completion report	MoT and its PIG

Intermediate Results Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Road user costs by truck along the project road sections and in project area (US$/veh-km)	This indicator measures road user costs (vehicle operating costs) by truck along the project road sections and in project area in US$ per vehicle-kilometer. This indicator will be measured at the end of the project.	at the end of project	project completion report	MOT and its PIG
Equipment for traffic count and road roughness measurement is used for populating data in RAMS	The indicator shows whether MOT has procured and is using permanent traffic counts and roughness profiler to populate Road Asset Management (RAMS) system for analysis and planning purposes.	annual	project progress reports	MoT and its PIG
Long-term Transport Sector Development Strategy is developed and endorsed	This indicates whether Transport Sector Development Strategy up to 2050 is developed and endorsed.	at the end of the project	project completion report	MoT and its PIG
Roads in good and fair condition as a share of total classified roads	Percentage of the total classified road network in the project area that is in good and fair condition depending on the road surface and the level of roughness. Classified roads are the roads that have been included in the roads legislation as public roads.	at the end of project	project completion report	MOT and its PIG

	Please note that this indicator requires supplemental information Supplemental Value: Total classified network in the project area (KM) The Supplemental value is the total classified network in the project area. Classified roads are the roads that have been included in the roads legislation as public roads.			
Size of the total classified network	Classified roads are the roads that have been included in the roads legislation as public roads.	at the end of project	project completion report	MOT and its PIG
Roads rehabilitated, Non-rural	Kilometers of all non-rural roads reopened to motorized traffic, rehabilitated, or upgraded under the project. Non-rural roads are roads functionally classified in various countries as Trunk or Primary, Secondary or Link roads, or sometimes Tertiary roads. Typically, non-rural roads connect urban centers/towns/settlements of more than 5,000 inhabitants to each other or to higher classes of road, market towns and urban centers. Urban roads are included in non-rural roads.	annual	progress reports	MOT and its PIG
Direct project beneficiaries	Direct beneficiaries are people or groups who directly derive benefits from an intervention (i.e., children who benefit from an immunization program; families that have a new piped water connection). Please note that this indicator requires supplemental information. Supplemental Value: Female beneficiaries (percentage). Based on the assessment and definition of direct project beneficiaries, specify what proportion of the direct project beneficiaries are female. This indicator is calculated as a	annual	official statistics data for Sugd Oblast	MOT and its PIG

	percentage.			
Female beneficiaries	Based on the assessment and definition of direct project beneficiaries, specify what percentage of the beneficiaries are female.	annual	official statistics data	MoT and its PIG

Annex 2: Detailed Project Description

CENTRAL ASIA:
Central Asia Road Links – Republic of Tajikistan (CARs-2)

The CARs-2 project will include three components, which were designed taking into account some of the recommendations of the World Bank Independent Evaluation Group's (IEG) recent evaluation of transport sector operations financed by the World Bank[22], including:

- **Improving the long-run financial viability of support for sustained transport**. One of the project objectives is to support improvements in road operations and asset management practices. Road asset management is an area which MoT has been working on with ADB for several years, which is currently in the process procuring a modern road database and improving the information management in MoT. In addition to the road database there is a need for procedures, equipment and budget to update the road database, a set of evaluation tools to evaluate the network data at project or network level, and properly trained persons to run the system. The activities proposed under CARs-2 are sought to complement MoT's efforts to develop an overall Road Asset Management System (RAMS). See the description of component 2 for more details.

- **Strengthening institutional capability to sustain transport outcomes**. The road sector in Tajikistan is challenged by weak institutional capacity. Failure to optimally manage the road network is aggravated by inefficiencies resulting from inadequate legal, regulatory, and institutional frameworks, and transitioning management capacity. Vehicle overloading, weak road safety and ineffective border crossings further impact road access and condition, and thereby limit mobility. Improvement of road operations proposed under the project will include a review of technical standards, norms and parameters on vehicle (truck) weight and axle load limits and tariffication as well as the development of Government's strategic plan for the location and operation of axle load control systems. It is envisaged to finance and install weight in motion equipment in several (2-3) strategic locations along the road network.

***Component 1: Rehabilitation of Priority Road Sections in Sugd Oblast (estimated total cost up to US$51.00 million out of which IDA financing of US$42.00 million)*:** The component is expected to finance the provision of works and consultants' services for the rehabilitation of approximately 70 kilometers of road sections in Sugd Oblast. These road sections will link the Republic of Tajikistan with its neighboring countries and include the following: (1) Kuckkak-Kim-Isfara-Guliston (BCP), (2) Dehmoi-Proletarsk-Madaniyat (BCP), including a link to the intermodal rail terminal in Proletarsk, and (3) Kanibadam-Patar (BCP) (see Annex 9, Map). These activities are expected to positively impact cross-border trade, improve market accessibility in Sugd Oblast as well as reduce road user costs along selected road links. The consultants' services for construction supervision will also include a baseline survey and analysis of the impact of the

[22] IEG, 2013, Improving Institutional Capability and Financial Viability to Sustain Transport: An evaluation of World Bank Group Support since 2002. Washington D.C: World Bank.

project interventions. The bidding documents are terms of reference for the construction supervision consultancy have been drafted.

The Feasibility Study covered the investigation of several sections, within and around Kanibadam, Isfara and Khujand cities, including those leading to respective Border Crossing Points (BCPs). The draft results provided economic and technical assessments, and recommendations for sections suitable for financing under the project. The condition of the sections to be financed under the project are poor to very poor, with a roughness index (IRI) varying from 5 to 7, with extensive potholes, cracks, raveling, and edge breaks, which require an immediate intervention. The adopted intervention strategy (to be reflected in the detailed designs) is based on the topographical and geotechnical surveys of the existing conditions and pavement deterioration, and investigation of different alternatives and consists of (i) reconstruction with removal of asphalt and placing of new bound and unbound pavement layers along existing alignment and (ii) new pavement construction along alignment. The designs of the project roads have also taken into consideration the integration of the rehabilitated sections accessing the border crossing facilities, according to their functional layouts.

The criteria for road capacity and geometry used for the detailed design have been taken from SNIP 2.05.02-85 (Roads and Highways). These criteria generally reflect the earlier former Soviet Union SNIP standards, but simplification has been introduced to eliminate the more excessive of the provisions contained in these earlier standards (see Table 1, Table 2).

Table 1: Main design parameters for Category II Road

Design element	Minimum values		
Design speed	120 km/h	100 km/h	60 km/h
Min. radius	800 (600) m	600 (400) m	150 (125) m
Max. gradient	4 %	5 %	7 %
Min. crest curve	15,000 m	10,000 m	2,500 m
Min. sag curve	5,000 (2,500) m	3,000 (1,500) m	1,500 (600) m

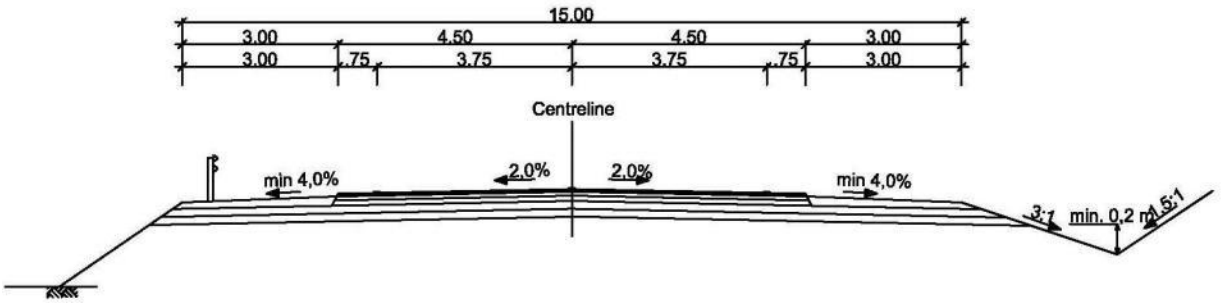
Note: Values in brackets are allowed in mountainous terrain

Table 2: Main design parameters for Category III Road

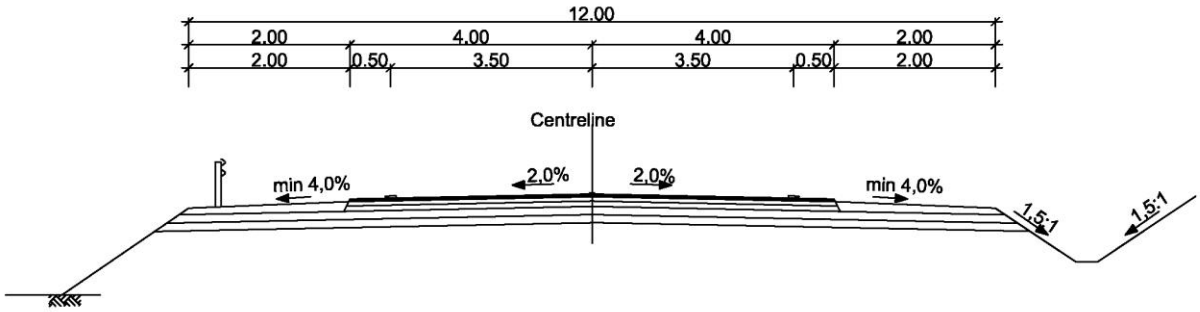
Design element	Minimum values		
Design speed	100 km/h	80 km/h	50 km/h
Min. radius	600 (400) m	300 (250) m	100 (100) m
Max. gradient	5 %	6 %	8 %
Min. crest curve	10,000 m	5,000 m	1,500 m
Min. sag curve	3,000 (1,500) m	2,000 (1,000) m	1,200 (400) m

The typical cross sections for SNIP category II and III road, have, respectively:

- Category II with a total width of the road 15 m, consisting of 2 x 3, 75 m carriageway, 2 x 3,75 m shoulders (0.75 m paved on each), and with a carriageway cross-fall 2 % and shoulder inclination 4 %, as shown in the figure below.



- Category III with a total width of width of 12 m, consisting of 2 x 3.50 m carriageway, 2 x 2.50 m shoulders (0.50 m paved on each) and with a carriageway cross-fall 2 percent and shoulder inclination 4 percent;



Replacement and repair of bridges is carried out only for the project sections. Almost all of the existing bridges are in poor condition or do not correspond to the related road category and need to be repaired or replaced with new ones. In Isfara bypass a new 45 m long bridge will be constructed. The bridge design standard in Tajikistan is based on the former Soviet Union standards. All structures are classified in classes of bridges according to the standards and design loads. The project study is carried out in accordance with the following norms and technical conditions in force in the Tajik Republic:

- SNIP 2.05.03-84* «Bridges and culverts»
- SNIP 2.05.02-85 «Roads and Highways»
- SNIP 2.02.01-83 «Foundations for buildings and structures»
- SNIP 2.02.03-85 «Pile foundations»
- SNIP 11-7-81* « Construction in seismic regions»

Drainage reconstruction and rehabilitation takes into consideration their location within or outside build-up areas. In the first instance covered concrete gutters will be used and placed at the edge of the shoulder. Every approx. 15 m a metal grating fit for traffic will be placed to allow for discharge of road surface runoff water. This system is regarded as best compromise between construction costs and maintainability. In sections where there is a greater distance between the shoulder, drainage and sidewalks, open concrete channels will be used, without compromising the safety of all road users. Kerbstones have to be placed in this case to avoid vehicles entering

such open channels as well as covering concrete slabs at pedestrian crossings. In the second instance the standard type channel will be used. The channel is trapezoidal in cross-section. In sections where the topography does not allow the discharge of the subsurface water over the embankment, filter drains will be used to drain, collect and convey water from the sub surface to the nearest open channel.

A road safety audit has been undertaken as part of the design work for the road sections, and its recommendations have been addressed, to ensure the safety of all road users, i.e.: pedestrians, vulnerable groups and drivers. These recommendations include, among others:

- installation of warning/limiting and information signs at the approach of residential areas and junctions, including street lightning, wherever possible;
- use of the appropriate materials for road marking, to ensure night visibility and inform accordingly all road users, i.e.: pedestrian crossings, left turns, junctions with local/feeder roads, approaching to schools, markets and other areas providing public services.
- location and relocation of bus stops at places that are safe and convenient for the community, vulnerable groups.

Component 2: Improvement of Road Operations and Asset Management Practices (estimated total cost US$2.00 million, financed by IDA). This component is proposed to finance the provision of goods, and consultants' services for the improvement of road operations and asset management practices. The improvement of road operations will include a review of technical standards, norms and parameters on vehicle (truck) weight and axle load limits and tariffication as well as the development of Government's strategic plan for the location and operation of axle load control systems (weight in motion). It is envisaged to finance and install weight in motion equipment in several (2-3) strategic locations along the road network. To improve asset management practices in the road sector, the component will provide financing towards the purchase of survey equipment (including geo-references) as well as support towards the final deployment of a road asset management system within the Economic Forecast Department of the MoT. These activities are expected to contribute to the reduction of the number of overloaded trucks in pilot locations and evidence-based decision regarding road asset management. The moderate risk to achieving this is mitigated by linking activities closely with the on-going efforts of the government (see Annex 4).

Overloading of trucks is a major problem in the Republic of Tajikistan increasing road deterioration and overall transportation costs. The State Service on Control and Regulation in the Field of Transport with around 287 staff (47 in its central office) is in charge, among other activities, of controlling the weight of vehicles in the Republic of Tajikistan and enforcing the current regulations by applying the corresponding penalties to the truckers. For this purpose, it uses mobile scales located at borders posts and at its regional offices. The available scales are old and require the vehicles to stop to be weighted. The trucks weight control in the Republic of Tajikistan could be improved with the availability of modern automated stationary weight scales, if possible with weight-in-motion technology, and a strategy to maximize the use of the available equipment, increase the coverage of the weight control surveys, minimize the disruption to the traffic flows, streamline the overloading penalties and procedures and exclude the human factor.

Road asset management is an area which MoT has been working on with ADB for several years and currently in the process of financing the improvement of information management in MoT (US$200,000) to (i) create a modern road database, improving the previously developed Highway information System (HIS) road database on a new platform with remote access; and (ii) improve the Information Technology of MOT in terms of hardware and software. At present, the 62 maintenance units collect yearly inventory, traffic and visual condition data, but this data is not assembled together in a centralized road database; thus is not being used efficiently for monitoring the road network and to support planning and programing of road works.

Efficient road asset management is however not just composed of a road database. In addition of a road database there is a need of procedures, equipment and budget to update the road database, a set of evaluation tools to evaluate the network data at project or network level, and properly trained persons to run the system. The activities proposed under CARs-2 are sought to complement MoT's efforts to develop an overall Road Asset Management System (RAMS) Equipment under consideration to be purchased will measure roughness (class I portable inertial laser based profiling system to be used for road network roughness survey and for quality control of road works, four wheel drive vehicle to mount the roughness measurement equipment, traffic counters, visual condition survey equipment).

Component 3: Project Management and Implementation (estimated total cost US$1.00 million, financed by IDA). This component is expected to finance the provision of goods, consultants' services, and training, operating costs, including a financial audit to support project coordination, implementation, and management. This component will also finance consultancy services related to citizen engagement and beneficiary surveys during implementation of the project, expected to be implemented with involvement of civil society organizations. The overall responsibility for the implementation of all activities under the project will lay with the MoT, including fiduciary responsibility for project execution. To support the MoT in all aspects of project implementation, a Project Implementation Group has been established which consists of a team of MoT staff assigned to the project and additional individual consultants. Please refer to Annex 3 for the staffing plan. An assessment of staffing levels and constraints of the MoT has been carried out during appraisal.

Several individual consultants will be hired to support MoT in the day-to-day administration of project activities including technical and procedural aspects, such as Bank's fiduciary requirements (FM and procurement), environmental and social safeguards, engineering aspects, project monitoring and citizen engagements (see Annex 3). A Project Operational Manual, acceptable to the Bank has been prepared by MoT a condition for negotiations to describe the processes and procedures for project management and implementation.

Annex 3: Implementation Arrangements

CENTRAL ASIA:
Central Asia Road Links – Republic of Tajikistan (CARs-2)

The following institutional arrangements for regional project coordination and country-based project implementation are being followed.

Regional Program Coordination

The participating countries of the program have an existing regional coordination mechanism, the Central Asia Regional Economic Cooperation (CAREC). CAREC is a partnership of ten countries (Afghanistan, Azerbaijan, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, People's Republic of China, the Republic of Tajikistan, Turkmenistan, and Uzbekistan) and is supported by six multilateral institutions, including the World Bank. CAREC aims to promote regional co-operation in four priority areas, including transport and trade facilitation. The on-going Transport and Trade Facilitation Strategy and Action Plan for 2008-2017 presents the shared vision of transport and trade facilitation development across the region, identifying three transport goals: (i) establish competitive transport corridors across the CAREC region; (ii) facilitate efficient movement of people and goods across borders; and (iii) develop safe, people-friendly transport systems. The Strategy's Implementation Action Plan details both physical and non-physical investments designed to improve the region's competitiveness, and expand trade – both among CAREC economies, regionally, and globally. At the policy level, the Transport Sector Coordinating Committee (TSCC) within CAREC would be the platform to discuss policy-related issues, such as the harmonization of standards, norms, and parameters on vehicle (truck) weight and axle load limits and tariffication. At the project's operational level, interactions between respective implementing agencies of the different phases would be expected and supported through financing provided by the Bank on project management and implementation.

Project Institutional and Implementation Arrangements

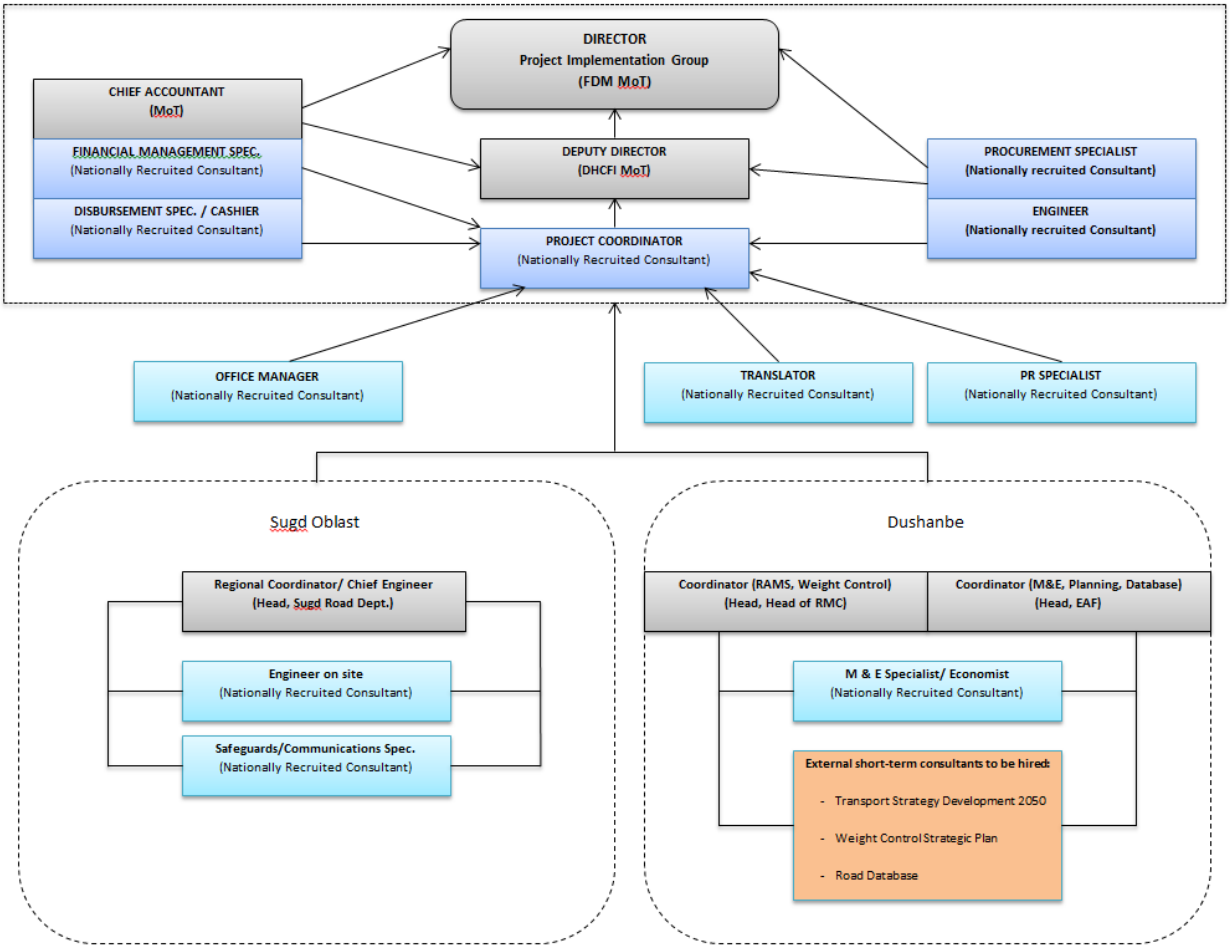
CARs-2 will be implemented by the MoT of the Republic of Tajikistan. The MoT will undertake overall responsibility for the implementation of all activities under the project, including fiduciary responsibility for the project execution. Staff of MoT has no prior experience with directly implementing World Bank-financed investment projects. Other donor-financed projects are being implemented through a structure of separate Project Implementation Units (PIUs) specifically established for project purposes.

To support the MoT in all aspects of the CARs-2 implementation a Project Implementation Group (MoT PIG) has been established by the MoT's Decree dated. August 1, 2014 (Decree No. 139) and amended December 15, 2014 (Decree No. 227). The MoT PIG will consist of a team of MoT staff assigned for the project and additional individual national consultants. It was agreed with the MoT that such individual national consultants will include (i) project coordinator, (ii) engineer, (iii) procurement specialist, (iv) financial management specialist, (v) disbursement specialist/cashier, (vi) safeguards/communications specialist, (vii) monitoring and evaluation (M&E) specialist/economist, (viii) resident engineer/regional coordinator; (ix) public relations specialist, as well as (x) logistic support staff, including one office manager and one translator (below see MoT PIG organogram).

The nationally recruited individual consultants will help the MoT in day-to-day administration of project activities including technical and procedural aspects, such as: (a) review of technical aspects; (b) procurement and financial management related issues with respect to contracts; (c) the management of the designated account; (d) financial management and reporting on the overall project; (e) execution of the project specific audit; (f) preparation of quarterly financial and bi-annual progress reports; (g) management of the environmental and social safeguards aspects; and (h) citizen's engagement and communications.

The proposed institutional arrangements shall provide for capacity building of the MoT staff (through exposure to Bank's procedures, specific training, etc.) as well as ensure sustainability of the project outcomes and impact.

MoT PIG Organogram



As a general requirement under the Bank-financed project the MoT has also prepared a draft Project Operational Manual (POM) with support from the Bank team. This document summarizes key aspects of the project and determines the responsibilities of the MoT as well as the tools to be applied during the project implementation. The POM is intended to ensure consistency, transparency, and accountability in the application of the project management procedures and will apply during the entire project implementation period.

Financial Management

The overall financial management (FM) functions under the project, including budgeting and planning, accounting and reporting, internal control procedures, staffing of the FM function and external audit will be handled by the PIG within the MoT. A full FM assessment was carried out for the MoT in accordance with the Financial Management Practices Manual issued by the Financial Management Sector Board in June 2014. This assessment indicates that the FM arrangements currently do not meet the necessary FM and disbursement requirements but upon meeting of one condition of negotiation and two conditions of effectiveness, the MoT will fully satisfy the Bank's fiduciary requirements. To meet the project's reporting and accounting requirements, accounting software (1C) will need to be installed in addition to the FM chapters of the existing Project Operational Manual (POM). The overall project risk for FM was assessed as high before mitigation and substantial after mitigation based on the above-mentioned measures.

Weaknesses and Action Plan

The following weaknesses were identified during the assessment:

i. The accounting staff has no prior experience in the WB policies and procedures and in external audit arrangements.

ii. The MoT needs to develop the draft Project Operational Manual (POM). The manual will be finalized prior to Effectiveness, and it will include an FM Chapter that will clearly describe financial reporting, accounting and internal control policies and procedures, budgeting and planning mechanisms. Specifically, segregation of duties will be addressed; and

iii. The existing accounting system of the MoT is different from the WB requirements for investment operations. Therefore, MoT will need to introduce the automated accounting software for the project.

The following actions were agreed to be implemented to ensure existence of acceptable FM arrangements that meet Bank requirements:

Action for capacity building	Responsibility	Completion Date
1.The contract for installation and adaptation of the 1C accounting software for project accounting, budgeting and reporting has been signed. The MoT accounting staff and the FM Consultant, who are hired by the MoT are fully trained on the adopted program with one year off-site support. The accounting system shall have inbuilt controls to ensure data security, integrity and reliability, and the functionality of automatic generation of IFRs.	MoT	By Effectiveness
2.The contract with FM consultant has been signed. The FM consultant will be responsible for project FM functions.	MoT	By Effectiveness
3.Finalize the FM chapter of POM to guide staff in daily project FM operations. The FM chapter will reflect the project arrangements on financial man-	MoT	By negotiations (already met)

agement, including internal control mechanisms, accounting and reporting procedures, disbursement procedures, funds flow and audit arrangements.		

Budgeting and planning

The Budgeting process follows the country's normal budgetary cycle, and is led by the Department of the Economic analysis and forecasting of the MoT. The MoT follows the 3-year Medium-Term Expenditure Framework (MTEF) budgeting format, based on new budget classification. The Road Maintenance Units (62) also prepare their annual budgets and send it to the MoT for consolidation. The consolidated budget for the MoT approves by the Minister prior to submission to the MoF for the annual approval of the budget estimates by the Parliament.

Under the project, the MoT will be responsible for the preparation of annual project budgets based on the procurement plan. Overall, project budgets, prepared on an annual basis, will form the basis for allocating funds to project activities. The budgets will be prepared in enough detail, by activities and account codes, and broken down by quarters. Annual budgets should be agreed with the World Bank before final approval, and approved annual budgets will then be entered into the accounting software and used for periodic comparison with actual results as part of the interim financial reporting. The annual budget will be prepared in detail, which is necessary for monitoring the existing projects and will be based on the final procurement plan approved by the World Bank.

Accounting and Reporting

The MoT uses the cash basis accounting. The accounting of the MoT's accounts is manual, using Excel spreadsheets. The MoT will need utilize the 1C accounting software which is capable to generate both IFRs and SOEs. Accounts and records for the project would be maintained by the MoT, using the automated accounting system to be installed for project accounting and reporting. The software would have capacity to produce interim financial reports in accordance with formats to be agreed with the Bank. Books of accounts for the project would be maintained using the automated system that, in the medium term, would be integrated with the system to be established by the MoT. All transactions would be recorded on a cash basis of accounting (until appropriate accounting standards are adopted for the public sector), with supporting documentation maintained in files for ready access by auditors and during implementation support missions of the World Bank. The Chart of Accounts for the project would be based on the Chart of Accounts developed by the MOF, and would be modified to allow tracking of project transactions and reporting by source of financing, project components, and type and category of expenditure.

Internal Controls

The MoT has to develop POM with strong control procedures. Strong controls should be adequately described in the developed POM. The POM should document key internal control mechanisms to be followed by the MoT in the application and use of project funds, with specific focus on ensuring completeness of accounting transactions, reliability of accounting data, safeguarding of assets of the projects, flow and accountability of funds, proper monitoring of contracts, proper authorization and documentation of all project expenditures, and full accountability for project funds. The POM has to reflect the typical organizational structure that will allow for adequate segregation of functions, defined job descriptions with different authority levels, as well as the

flow of funds to support project activities, proper management of the bank accounts, including regular reconciliation of bank statements with project records.

Staffing

Finance and Accounting Department consists of 7 staff, including the head, who also acts as the chief accountant of the MoT. The chief accountant of the MoT will have overall responsibility for project financial management function. To ensure sound financial management of the project funds, a financial management consultant will be hired, and is responsible for day-to-day financial management operations. The financial management consultant will work under the direction of the Chief Accountant and is expected to train other staff within the Finance and Accounting Department

External Audit

The audit of the proposed project will be conducted (i) on an annual basis; (ii) by independent auditors and on terms of reference acceptable to the World Bank; and (iii) according to the International Standards on Auditing (ISA) issued by the International Auditing and Assurance Standards Board of the International Federation of Accountants (IFAC). The terms of reference to be used for the project audit would be prepared by the MoT and cleared by the Bank, and submitted to the SCI&SPM before contracting the auditor, under the block audit arrangement.

The annual audited project financial statements would be provided to the World Bank within six months of the end of each fiscal year and also at the closing of the project. In accordance with the World Bank's Access to Information Policy audited project financial statements shall be made publicly available. Upon receipt of the audited financial management statements, the Bank would also make them publicly available. The cost of the audit would be financed from the proceeds of the Grant. The table below shows the audit reports that would be required to be submitted by the project implementation agency, and the due date for submission of the audit reports.

Audit Report	Due date
Project Financial Statements The Project Financial Statements include Sources and Uses of Funds, Uses of Funds by Project activities, Statement of Expenditures Withdrawal Schedule, Designated Account Statement, Notes to the financial statements, and Reconciliation Statement	Within 6 months of the end of each fiscal year and also at the closing of the project

Disbursements

Disbursements from the IDA Account will follow the transaction-based method, i.e., traditional Bank procedures: including advances to the designated account, direct payments, Special Commitments and reimbursement (with full documentation and against Statements of Expenditures - SOEs). The separate designated account will be opened in a National Bank of Tajikistan (NBT). For payments above the minimum application size, as will be specified in the Disbursement Letter, the MoT and its PIG may submit withdrawal applications to the Bank for payments to suppliers and consultants directly from the Grant/Credit Account. Disbursement arrangements will be detailed in the Disbursement Letter.

Procurement

General

The procurement will be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers" dated January 2011 and revised July 2014 and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers" dated January 2011 and revised July 2014, and provisions stipulated in the Financing Agreement. The World Bank Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credit and Grants dated October 15, 2006 and revised on January 2011, would also apply. The general description of various items under different expenditure categories is provided below. For each contract to be financed by the Grant/Credit, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame would be agreed between the Recipient and the Bank team and will be reflected in the Procurement Plan.

Procurement of Goods, Works, Non-Consulting Services and Consultant Services

Goods to be procured under the project would include equipment for improvement of road operations and road asset management, road safety equipment. The works shall include rehabilitation of roads and construction of culverts and drainages. Consultant services would include technical supervision, project related studies and reviews, project audit and services of individual consultants to support project coordination and implementation.

Procurement of works, goods and non-consulting services would be conducted using the Bank's Standard Bidding Documents (SBD) for all ICB and an ECA Sample Bidding Document for Procurement of Works and Goods following NCB procedures for all NCB. The standard NCB provisions for Tajikistan, as included in the Financing Agreement, would be applied to all the NCB contracts. For selecting consulting firms depending on the nature and complexity of assignments, interest to foreign firms and need for international expertise, estimated budget of the services the following methods would be used: Quality and Cost-Based Selection (QCBS), Quality-Based Selection (QBS), Least Cost Selection (LCS), Selection Based on Consultant's Qualification (CQS), Selection under a Fixed Budget (FBS) and Single-Source Selection (SSS). Short lists of consultants for services estimated to cost less than USD300, 000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

Operational Costs

Operating costs would include all expenses necessary to ensure proper implementation of the project, such as local travel and communication expenses, bank charges, etc. The quarterly budget for operating costs would be prepared and cleared with the Bank**.**

Assessment of the agency's capacity to implement procurement

The assessment of the MoT capacity for implementation of procurement activities was carried out in June 2014 and documented in the P-RAMS.

Procurement Arrangement

Procurement activities for the project will be carried out by the MoT through the PIG that has been established. The MoT handled several donor-funded projects in the sector through separate PIUs in the past. However, it does not have prior experience with the World Bank-financed projects and limited experience of procurement under the national legislation. The MoT does not have specialized procurement staff. High staff turnover takes place in the Ministry. The MoT unlikely will dedicate its resources to the project as the existing staff has its own workload. Therefore, additional procurement capacity will be required for the efficient implementation of the project. This may be done through hiring of a local procurement consultant responsible for supporting the MoT staff during the preparation, conduct and completion of procurement process. The consultant should also ensure transfer of skills to the MoT staff involved in procurement through on-the-job trainings. The works will be procured following pre-qualification and SBD large works (FIDIC Contract). Considering procurement capacity in MOT an International Procurement Consultant (could be offline) is required during first year of project implementation. The procurement capacity augmentation has been discussed during appraisal and agreed with the Recipient.

Continuous training of the MoT staff involved in procurement activities especially staff working in the Finance Department, Executive Office and Tender Evaluation Committee members is recommended. Considering sustainability, the training program should also include trainings on public procurement so the MoT gets the status of "Qualified procuring entity" and be included to the roster of procuring entities. Implementation of the procurement capacity building program under the preparation grant shall be monitored by the Bank.

The overall project risk for procurement is rated ***'High'***. After mitigation measures are implemented, the residual risk would be '***Substantial***'. The risks associated with procurement and the mitigation measures were identified in the assessment of the agency's procurement capacity and are summarized in the table below:

Description of Risk	Risk Rating	Mitigation Measures	Residual Risk Rating
Government officials, who would be involved in project procurement through Tender Committees may not be familiar with the international procurement procedures.	S	The PIG will arrange for briefing of the evaluation committee members on the main principals of evaluation procedure before the evaluation starts.	M
Involvement of SCISPM in bid opening and review of BER and associated potential delays	H	(i) The Bank Procurement team is in dialogue with SCISPM to improve bid receiving and opening process. SCISPM promised to implement the improvements recommended. (ii) The Bank and SCISPM is in the process of agreeing with a timeline to finalize tenders from bid document preparation to contract award. The Bank team will closely monitor the above mitigation measures.	S

Potential procurement delays due to limited resources dedicated to the project; due to complexity of the procurement process and relatively slow decision making within the MoT; due to arrangements for clearance of evaluation reports with the SCISPM.	H	Monitoring procurement progress against the detailed procurement plan; timeframes for the bid evaluation, including the time allocated to each agency and accountability for procurement decisions will be covered in detail the Project Operation Manual. Hiring of Local Procurement Consultant and an International procurement Consultant (could be offline) has been agreed.	S
Contract administration procedures may not be adequate to ensure efficient and timely contract implementation; contract amendments not processed diligently	S	Establishment of contract management system; more emphasis and training on appropriate contract management; regular physical inspections by Bank supervision mission.	M
Perceived level of corruption in the country is high.	H	Enforcement of public disclosure and transparency provisions of the Bank's Guidelines; Close Bank's implementation supervision.	S

Procurement Plan (PP)

The initial procurement plan has been prepared by MoT and reviewed by the World Bank team covering the procurement activities expected under the project components. After the project is approved by the Board the PP shall be published on the MoT website and Bank's external website. The PP would be updated in agreement with the Bank team at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. The prior review thresholds set out in the Procurement Plan will be reviewed from time to time and revised as needed during the project implementation.

The thresholds for methods of procurement and prior review limits are detailed below.

Expenditure Category	Contract Value (USD)	Procurement Method	Bank Prior Review
Goods (including non-consulting services)	≥1,000,000	ICB	All the ICB contracts
	< 1,000,000	NCB	First 2 NCB contracts and all other NCB contracts above $500,000
	≤ 100,000	Shopping	The 1st Shopping contract
	NA	DC	All DC contracts

Works	≥5,000,000	ICB	All the ICB contracts
	< 5,000,000	NCB	First 2 NCB contracts and all other NCB contracts above $2 million
	≤ 200,000	Shopping	The 1st Shopping contract
	NA	DC	All DC contracts
Consultant Services	Irrespective of Value	QCBS, QBS, FBS, LCS, CQS*	All contracts above USD 100,000 for firms plus the 1st CQS contract regardless of value; and all contracts above USD 50,000 for individuals; and all SSS contracts.
	NA	SSS	
	NA	IC	

Notes:
ICB – International Competitive Bidding
NCB – National Competitive Bidding
DC – Direct Contracting
QCBS – Quality and Cost Based Selection
QBS – Quality Based Selection
FBS – Fixed Budget Selection
LCS – Least Cost Selection
*CQS – Selection Based on Consultants' Qualification would be followed depending on type of assignments for estimated value less than USD 300,000
SSS – Single Source Selection
IC – Individual Consultant selection procedure
NA – Not Applicable

Frequency of Procurement Supervision

In addition to the prior review supervision to be carried out from the country office, the capacity assessment of the Implementing Agency has recommended two supervision missions per year during which ex-post reviews would be conducted on a sample basis (20 percent in terms of number of contracts) for the contracts that are not subject to the Bank's prior review. One post review report, which would include physical inspection of sample contracts, would be prepared each year. At least ten percent of the contracts would be physically inspected.

Disclosure

The following documents shall be disclosed in the MoT website: (i) procurement plan and updates, (ii) invitation for bids for goods and works for all ICB and NCB contracts, (iii) request for expression of interest for selection/hiring of consulting services, (iv) contract awards of goods and works procured following ICB/NCB procedures, (v) list of contracts/purchase orders placed

following shopping procedure on quarterly basis, (vi) short list of consultants, (vii) contract award of all consultancy services, (viii) list of contracts following DC or CQS or SSS on a quarterly basis, (ix) Monthly physical and financial progress of all contracts and (x) action taken report on the complaints received on a quarterly basis. The supply and Installation bidding documents shall include a clause to put up a notice board in the construction site disclosing the contract details (description, contractor name and contract amount, starting date, completion date, physical progress and financial progress).

The following details shall be sent to the Bank for publishing in the Bank's external website and UNDB: (a) invitation for bids for procurement of goods and works using ICB procedures, (b) request for expression of interest for consulting services with estimated cost more than $300,000, (c) contract award details of all procurement of goods and works using ICB procedure, (d) contract award details of all consultancy services with estimated cost more than $300,000, and (e) list of contracts/purchase orders placed following SSS or CQS or DC procedures on a quarterly basis.

REPUBLIC of TAJIKISTAN
CENTRAL ASIA ROAD LINKS PROJECT

PROCUREMENT PLAN - GOODS AND WORKS
План закупок товаров и работ
(Date of PP: December 15, 2014; Date of WB NOL: _____)
(Дата ПЗ: декабрь 15, 2014; Дата одобрения ВБ: _____)

Item №	Component Reference as per PP	Contract Ref. №	Contract Description	Plan vs Actual	Procu. Method	WB Rvw (Prior/ Post)	Date of invitation to PQ	Date of PQ proposal submission	PQ Evaluation Report	WB no-objection to PQ Report	Date of Draft BD to WB	WB No-objection to BD	Date of Invitation to Bids	Date of Bid Opening	Bid Evaluation Report	WB No-objection to Contract Award	Date of Contract Signing	Date of Contract Completion	Remarks
№	Коды согласно Таблице Затрат	№ Контракта	Описание контракта	План и Факт	Метод закупок	Обзор Банка (предварит./последующ.)	Дата объяв. пригл. на пред. квал.	Дата подачи заявок на пред. квал.	Оценочный отчет по пред. квал	Одобрение ВБ на ПК отчет	Конкурс. документ на рассмотрение ВБ	Одобрение ВБ на конкурс. док.	Объявление	Вскрытие конкурсных заявок	Оценочный отчет	Одобрение ВБ на присуждение контракта	Подписание контракта	Завершение контракта	Примечания
GOODS/ТОВАРЫ																			
1		CARs/NCB-G-01	Roughness Profiler	**Plan/План**	NCB	post	N/A	N/A	N/A	N/A	15-May-15	25-May-15	15-Jun-15	1-Sep-15	15-Sep-15	1-Oct-15	15-Oct-15	15-Oct-16	
			Оборудование для замера неровности дорог	**Actual/Факт**															
2		CARs/SH-G-02	PIG office equipment /furniture	**Plan/План**	SH	post	N/A	N/A	N/A	N/A	15-Feb-15	20-Feb-15	25-Feb-15	N/A	15-Mar-15	N/A	1-Apr-15	1-May-15	
			Офисное оборудование/ мебель ГРП	**Actual/Факт**															
3		CARs/SH-G-01	1C Accounting Software	**Plan/План**	SH	prior	N/A	N/A	N/A	N/A	19-Dec-14	20-Dec-14	27-Dec-14	N/A	1-Feb-15	N/A	1-Mar-15	1-Apr-15	
			Программное обеспечение (софт) 1С Бухгалтерия	**Actual/Факт**															
4		CARs/NCB-G-02	Traffic counters	**Plan/План**	NCB	prior	N/A	N/A	N/A	N/A	1-May-15	10-May-15	15-May-15	N/A	15-Sep-15	N/A	15-Oct-15	15-Oct-16	
			Оборудования для подсчета интенсивности	**Actual/Факт**															
5		CARs/NCB-G-03	Weight Control Equipment	**Plan/План**	NCB	post	N/A	N/A	N/A	N/A	N/A	N/A	15-Jul-17	1-Sep-17	15-Sep-17	N/A	15-Oct-17	15-Oct-18	
			Весо-габаритное оборудование	**Actual/Факт**															
6		CARs/NCB-G-06	Vehicles for PIG	**Plan/План**	NCB	prior	N/A	N/A	N/A	N/A	N/A	N/A	1-Mar-14	1-Apr-15	15-Apr-15	N/A	1-May-15	1-Sep-15	
			Автомашины для ГРП	**Actual/Факт**															
7		CARs/NCB-G-04	Road Database Hardware	**Plan/План**	NCB	post	N/A	N/A	N/A	N/A	N/A	N/A	1-Aug-15	1-Sep-15	15-Sep-15	N/A	15-Oct-15	15-Apr-16	
			База данных дорог	**Actual/Факт**															
WORKS/РАБОТЫ																			
1		CARs/ICB-01	Rehabilitation of roads	**Plan/План**	ICB	prior	19-Dec-14	10-Feb-15	25-Feb-15	10-Mar-15	10-Mar-15	15-Mar-15	15-Mar-15	1-May-15	15-May-15	25-May-15	10-Jun-15	30-Oct-19	
			Реабилитация дорог	**Actual/Факт**															

REPUBLIC OF TAJIKISTAN

CENTRAL ASIA ROAD LINKS PROJECT

Procurement Plan- Consultants

План Закупок - Консалтинговые услуги

(Date of PP: December 15, 2014; Date of WB NOL: _____)

(Дата ПЗ: декабрь 15, 2014; Дата одобрения ВБ: _____)

Item №	Contract Ref.	Contract Description	Plan vs Actual	Select. Method	WB Review (Prior/ Post)	Request for Exp. Of Interest	Draft RFP (incl. TOR, Short List)	WB No-objection to RFP (full package)	RFP Issued	Date of Proposal Submission	Tech. Evaluation Report (TER)	WB No-objection to TER	Combined Tech & Fin Eval. Report	Draft Final Contract	WB No-objection to Draft Contract	Date of Contract Signing	Date of Contract Completion	Remarks
№ Пункта	№ Контракта	Описание контракта	План и Факт	Метод отбора	Обзор Банка (предварит./ последующ.)	Запрос на выраж. заинт	Проект ППП вкл ТЗ и КС	Одобрение Банка на полный пакет ППП	Выпуск ППП	Срок подачи предложений	Технический оценочный отчет (ТО)	Одобрение ВБ на ТО	Комбин. оцен. отчет	Проект финального контракта	Одобрение Банка на контракт	Подписание контракта	Завершение контракта	Примечания
1	CARs/CS-QCBS-01	Consulting Services for construction supervision	**Plan/План**	**QCBS**	Prior	19-Dec-14	15-Jan-15	25-Jan-15	25-Jan-15	25-Feb-15	10-Mar-15	20-Mar-15	5-Apr-15	20-Apr-15	1-May-15	10-May-15	30-Oct-19	
		Консультационные услуги по надзору за строительными работами	**Actual/Факт**															
2	CARs/CS-LCS-01	Project audit	**Plan/План**	**LCS**	Prior				To be selected by the State Investment Committee							1-May-15	TBD	Block audit
		Аудит проектных счетов	**Actual/Факт**															
3	CARs/CS-LCS-02	M&E Survey (user satifaction survey)	**Plan/План**	**CQS**	Prior	25-Jan-15	25-Jan-15	1-Feb-15	1-Feb-15	15-Feb-15	1-Mar-15	10-Mar-15	NA	15-Apr-15	20-Apr-15	1-May-15	30-Oct-19	
		Исследование пользователей дорог	**Actual/Факт**															

REPUBLIC OF TAJIKISTAN
CENTRAL ASIA ROAD LINKS PROJECT

Procurement Plan- Consultants
План Закупок - Консалтинговые услуги
(Date of PP: December 15, 2014; Date of WB NOL: _____)
(Дата ПЗ: декабрь 15, 2014; Дата одобрения ВБ: _____)

Item №	Contract Ref.	Contract Description	Plan vs Actual	Firm or Ind.	Select. Method	WB Review (Prior/ Post)	Draft TOR	WB No-objection to TOR	Request for Exp. Of Interest	Evaluation report for Short list	WB No-objection to RFP/ Short list	RFP Issued (for CQS)	Proposal Submission	WB No-objection to Eval.Report	Draft Final Contract	WB No-objection to Draft Contract	Date of Contract Signing	Date of Contract Completion	Remarks
№ Пункта	№ Контракта	Описание контракта	План и Факт	Фирма или Индивидуал	Метод отбора	Обзор Банка (предварит./ последующ)	Проект ТЗ	Одобрение ВБ	Запрос на выраж. заинт	Оцен. отчет по краткому списку	Одобрение ВБ на ППП и краткий список	Выпуск ППП	Срок подачи предложений	Одобрение ВБ на оцен. Отчет	Проект финального контракта	Одобрение ВБ на финальный контракт	Подписание контракта	Завершение контракта	Примечания
1	CARs/CS-IC-01	Project Coordinator	**Plan/План**	Ind	**IC**	prior	10-Feb-15	15-Feb-15	15-Feb-15	1-Mar-15				7-Mar-15	15-Mar-15	1-Apr-15	1-Apr-15	1-May-20	
		Координатор проекта	**Actual/Факт**																
2	CARs/CS-IC-02	FM Consultant	**Plan/План**	Ind	**IC**	prior	10-Feb-15	15-Feb-15	15-Feb-15	1-Mar-15				7-Mar-15	15-Mar-15	1-Apr-15	1-Apr-15	1-May-20	
		Консультант по финансовому менеджменту	**Actual/Факт**																
3	CARs/CS-IC-03	Safeguards/Communications Consultant	**Plan/План**	Ind	**IC**	post	10-Feb-15	15-Feb-15	15-Feb-15	1-Mar-15				NA	15-Mar-15	NA	1-Apr-15	1-May-20	
		Консультант по экологии и PR	**Actual/Факт**																
4	CARs/CS-IC-04	Engineer	**Plan/План**	Ind	**IC**	post	10-Feb-15	15-Feb-15	15-Feb-15	1-Mar-15				NA	15-Mar-15	NA	1-Apr-15	1-May-20	
		Инженер	**Actual/Факт**																
5	CARs/CS-IC-05	Procurement Consultant	**Plan/План**	Ind	**IC**	prior	10-Feb-15	15-Feb-15	15-Feb-15	1-Mar-15				7-Mar-15	15-Mar-15	1-Apr-15	1-Apr-15	1-May-20	
		Консультант по закупкам	**Actual/Факт**																
6	CARs/CS-IC-06	Regional Coordinator	**Plan/План**	Ind	**IC**	prior	10-Feb-15	15-Feb-15	15-Feb-15	1-Mar-15				7-Mar-15	15-Mar-15	1-Apr-15	1-Apr-15	1-May-20	
		Региональный координатор	**Actual/Факт**																
7	CARs/CS-IC-07	M&E Economist	**Plan/План**	Ind	**IC**	post	10-Feb-15	15-Feb-15	15-Feb-15	1-Mar-15				NA	15-Mar-15	NA	1-Apr-15	1-May-20	
		Консультант по МиО /Экономист	**Actual/Факт**																
8	CARs/CS-IC-08	Disbursement Specialist/Cashier Consultant	**Plan/План**	Ind	**IC**	post	10-Feb-15	15-Feb-15	15-Feb-15	1-Mar-15				NA	15-Mar-15	NA	1-Apr-15	1-May-20	
		Консультант по выплатам	**Actual/Факт**																
9	CARs/CS-IC-09	Office-Manager	**Plan/План**	Ind	**IC**	post	10-Feb-15	15-Feb-15	15-Feb-15	1-Mar-15				NA	15-Mar-15	NA	1-Apr-15	15-Jun-20	
		Офис-менеджер	**Actual/Факт**																
10	CARs/CS-IC-10	Translator	**Plan/План**	Ind	**IC**	post	10-Feb-15	15-Feb-15	15-Feb-15	1-Mar-15				NA	15-Mar-15	NA	1-Apr-15	15-Jun-20	
		Переводчик	**Actual/Факт**																
11	CARs/CS-IC-11	Transport Sector Development Strategy Study	**Plan/План**	Ind	**IC**	prior	10-Feb-15	15-Feb-15	15-Feb-15	1-Mar-15				7-Mar-15	15-Mar-15	1-Apr-15	1-Apr-15	15-Jun-20	
		Обзор стратегии развития транспортного сектора	**Actual/Факт**																
12	CARs/CS-IC-12	Study on Axle Load Control Strategy	**Plan/План**	Ind	**IC**	prior	15-May-15	20-May-15	20-May-15	10-Jun-15				15-Jun-15	20-Jun-15	25-Jun-15	1-Jul-15	15-Jun-20	
		Исследование по стратегии весогабаритного контроля	**Actual/Факт**																
13	CARs/CS-IC-13	RAMS Implementation Consultant	**Plan/План**	Ind	**IC**	prior	15-May-15	20-May-15	20-May-15	10-Jun-15				15-Jun-15	20-Jun-15	25-Jun-15	1-Jul-15	1-Jan-16	
		Консультант по реализации RAMS	**Actual/Факт**																
14	CARs/CS-IC-14	International Procurement Consultant	**Plan/План**	Ind	**IC**	prior	10-Feb-15	15-Feb-15	15-Feb-15	1-Mar-15				7-Mar-15	15-Mar-15	1-Apr-15	1-Apr-15	1-Apr-16	
		Международный Консультант по закупкам	**Actual/Факт**																

Environmental and Social (including safeguards)

Policy on Environmental Assessment (OP/BP 4.01) is triggered. Road rehabilitation will generally be undertaken within the existing right of way of the road and environmental impacts can be mitigated by good construction and housekeeping practices. In order to comply with national environmental legislation and requirements of the World Bank, the EA/EMP was prepared by the MoT which covers road sections financed under the project.

During project preparation, the Bank team consulted with communities in project areas. Intended project beneficiaries view the proposed project positively overall and expect significant benefits in terms of better access to markets, better access to services, better access to jobs, and improved social cohesion/community ties. The focus groups/meetings with communities and CSOs in Sugd region revealed the following:

- Community preferences on the road sections: The most commonly used road sections seem to be those from Khujand to the Kyrgyz Republic (Guliston) border, as well as the road from Khujand-Kanibadam-Isfara. Travel to Guliston constitutes the first leg of the travel to Russia. Sugd residents reach Kyrgyz border through taxis/busses/mini vans and fly out of Osh due to lower airline ticket costs from Osh as opposed to any city in Tajikistan. Tajik residents cross the Kyrgyz border in order to purchase goods and products, such as fertilizers, fuel, cement, spare parts for cars, other machinery, as well as fruits and vegetables. There seems to be a widespread practice of mass-purchasing Chinese-made clothes/products from large markets in Bishkek (Dordoi market), and sell them in the Sugd region. Farmers/small scale entrepreneurs travel to Isfara to sell their products in the internal market. Isfara link is critical for communities because it contains a number of processing plants, as well as 'middlemen' who would export goods to other countries, Russia in particular. Communities mentioned that if the road conditions were better they would be able to further 'export goods abroad, such as apricots, tomatoes, onions, melons, and could bring good quality seeds from abroad'. Meanwhile, travel to Patar seems minimal, as the border with Uzbekistan has been reportedly closed for '5-6 years.'
- ***Cost/Time of travel***: Travel from Khujand to Osh takes about 5 hours. There are frequent minibuses traveling to Osh. Public transportation cost about 2.5 somoni. Private taxis are also widely used to get to the Gulistan border crossing. For those that frequently travel to Gulistan, their standard maintenance cost is about 3000 somoni, every 2-3 months.
- ***Road safety:*** Many accidents happen in the main road due to speeding particularly between Karachikum-Lohuti. 6 bridges on the main road sections were reported as being narrow and in poor condition and one reportedly contains a blind spot, increasing the chances of accidents. At densely populated sections close to the road, communities requested sidewalks or underground pass for pedestrians as part of the road rehabilitation scope, particularly in locations where multiple service facilities reside, such as schools, markets, and hospital. They also asked to install more road signs, as well as markings to clearly show lanes, visible at night.

- ***Vulnerable groups:*** The two vulnerable groups highlighted were school children and disabled people. There are a number of schools accessed by the main road and lack of cross walks put the school children in danger when crossing the road. Public transportation/social facilities are not designed to accommodate the needs of people with various disabilities. Many disabled people are not able to go to school or get to hospitals or clinics because there are no ramps at sidewalks or at facility entrances (if they are in wheelchair). Communities mentioned that road safety and access measures should take into account the needs of such groups.
- ***Axle load weight limits and border crossings:*** Communities mentioned that the number one reason for road damage is overloaded trucks. Although truck drivers are aware of weight limits and despite scales installed in the border crossings, the axle load limits are often not respected. Both community members and CSOs consulted mentioned that additional fees are often paid by truck drivers at border crossings to compensate for overloading.

The Environmental Category of the project is "B". The alignment of the proposed road sections will go mainly along the existing road and in some places (i.e. section around Isfara) through open space or farmland. The road alignment will not go through either forests or protected areas/important natural habitats and OP/BP 4.36 Forests and OP/BP 4.04 Natural Habitats will not be triggered.

The MoT is responsible for the implementation of all transport and communications related projects. PIG will support MoT on a day-to-day basis on safeguards related functions of the project, assessment and analysis of project progress, and implementation of safeguards policies. PIG staff will be assigned to update the environmental and social safeguards documentation and monitor compliance with safeguards requirements during project implementation.

Monitoring & Evaluation

The project design includes an agreed set of Project Monitoring Indicators to effectively measure the outcome and results of the project and program. The indicators (Annex 1) will be collected, monitored, reported and disseminated by MoT with support from PIG. The baseline data for CARs-2 has been collected at appraisal by PIG and the Bank team from secondary sources.

Capacity for data collection within MoT and its PIG is assessed as satisfactory. The cost for establishing data collection, monitoring and reporting will be borne from the project (component 3: project management and implementation).

Role of Partners

The World Bank has been working in close coordination with other development partners in Central Asia on transport issues to ensure complementary support along transport corridors. Exim Bank of China has become the largest investment partner of the Government in the road sector, followed by ADB. For the purposes of the Central Asia Road Links Program, close coordination with CAREC is foreseen as well as development partners that are parallel-financing road segments along the corridors. For the second phase (CARs-2) in the Republic of Tajikistan, this would include JICA, EBRD, EDB, ADB as well as the Exim Bank of China.

Annex 4: Operational Risk Assessment Framework (ORAF)

CENTRAL ASIA:
Central Asia Road Links – Republic of Tajikistan (CARs-2)

Risks

Project Stakeholder Risks

Stakeholder Risk	Rating	High

Risk Description:

Borrower: Some road links may be on, through or in close proximity to the border with the Kyrgyz Republic; in such an event, the Bank may require an agreement between the affected governments that the parties agree on the financing of the specific roadway without impacting a final resolution of border demarcation.

Risk Management:

Borrower: As an international organization, the World Bank must remain neutral in any disputes between neighboring countries with respect to the demarcation of their borders. From its side the Bank will facilitate dialogue between MoTs of both countries on arrangements for discussion and resolution of regional project issues.

Resp: Both	Status: In Progress	Stage: Both	Recurrent: ☑	Due Date:	Frequency: Yearly

Risk Description:

Donors: This is the first Bank-supported project in the transport sector in Tajikistan. As the road links proposed for rehabilitation under this project are not located along CAREC main corridors, there is a risk of non-cooperation from other donor agencies.

Risk Management:

Donors: The Bank team and MoT will organize regular exchange with other donors; a donor coordinating group will be established for financing of the particular project in case other development partners would be interested in providing co-funding. Fiduciary and supervision requirements for the project should be synchronized under the project as well.

Also the project will utilize best practice of other donors in design of the trade facilitation component at selected BCPs.

Resp: Both	Status: In Progress	Stage: Both	Recurrent: ☑	Due Date:	Frequency: Yearly

Risk Description:

Risk Management:

Beneficiaries: The risk is that stakeholder support for the project at community level may be eroded due to perceived poor quality of construction works.	**Beneficiaries**: Regular implementation support missions with mandatory field visits to project sites and discussions with local communities will be conducted to ensure quality of works. Participatory construction works monitoring mechanism has been discussed at the project appraisal stage. The Bank team will take extra efforts to ensure full disclosure of proposed designs and implementation plans by MoT to local communities with strict adherence to World Bank safeguards policies. Resettlement action plans will be disclosed separately following intense consultations with stakeholders. Specific consultations will be undertaken for both Tajik and Kyrgyz communities living in close proximity to the road sections proposed for rehabilitation.					
	Resp: Both	Status: Not Yet Due	Stage: Both	Recurrent: ☑	Due Date:	Frequency: Yearly
Implementing Agency (IA) Risks (including Fiduciary Risks)						
Capacity	Rating	Substantial				
Risk Description: The MoT lack experience in working on World Bank financed projects, which leads to risk of poor quality of preparatory studies, poor supervision and contract management.	**Risk Management:** The proposed Project will be implemented by MoT on behalf of the Recipient (Tajikistan) which is represented by the Ministry of Finance of the Republic of Tajikistan. Based on discussions with MoT, three options have been considered for the implementation arrangements of the proposed Project: PIU for ADB funded projects, PIU for IsDB funded projects and direct implementation through the MoT using its existing capacity and staff. Thorough analysis of implementing agency capacity assessment has been conducted by the Bank at the project design stage and identified the establishment of a Project Implementation Group (PIG) as the most suitable option for project implementation. The PIG will have to be adequately staffed satisfactory to the Bank team. Individual national consultants for procurement, FM and safeguards as well as others will have to be selected on a competitive basis and approved by the Bank. The POM has been prepared and relevant staff of the PIG and MoT will be trained during project implementation. The first procurement training has been conducted at the end of November 2014.					
	Resp: Both	Status: In Progress	Stage: Both	Recurrent: ☑	Due Date:	Frequency: Quarterly
Governance	Rating	High				

Risk Description: There is a risk that the MoT fails to implement proper contract oversight, which would lead to poor quality of civil works and reputational risk both to the Bank and Implementing Agency.	**Risk Management:** An internationally recruited construction supervision consultant will be hired to supervise the implementation of civil works. This will be complemented by regular implementation support missions by the Bank team scheduled at least twice a year. The project will also design grievance mechanism which would allow implementation of the participatory approach in monitoring and oversight of civil works. There is a significant support to the proposed project from the top level of Sugd oblast which at some extent increases supervision over project implementation.					
	Resp: Both	Status: Not Yet Due	Stage: Both	Recurrent: ☑	Due Date:	Frequency: Quarterly
Project Risks						
Design	Rating	Moderate				
Risk Description: There is a risk that quality of construction may suffer from poor quality design and poor execution quality. In addition sustainability of investments is facing a risk of increased volume of overloaded trucks through the rehabilitated sections of the road which may lead to road conditions and road safety deteriorating. There is a risk that the project will only focus on civil works and will not take into consideration risks related to increased vehicle traffic on the rehabilitated sections of Road which may lead to increased number of accidents. Road safety on the rehabilitated road sections should be also one of the priorities treated seriously by the MoT.	**Risk Management:** The Bank will provide significant technical assistance to ensure that the pavement design is suitable for local conditions. In addition, the Bank will also undertake review of technical standards, norms, and parameters on vehicle (truck) weight and axle load limits and tariffication as well as the development of Government's strategic plan for the location and operation of axle load control systems/scales to increase sustainability of heavy project investments. Road safety measures till be integrated in the design of the project and will require consultations with communities located along the road side.					
	Resp: Both	Status: Not Yet Due	Stage: Implementation	Recurrent: ☑	Due Date:	Frequency: Yearly
Social and Environmental	Rating	High				
Risk Description:	**Risk Management:**					

Although the project will mainly cover rehabilitation and upgrade of existing road sections and the social and environmental impacts will be predictable, localized and readily mitigated, there could be some land acquisition and resettlement associated with possible bypass of Isfara district in particular. This may raise issues associated with social and environmental impacts that need to be addressed. Limited monitoring, enforcement and reporting of implementation of social and Environmental aspects of the project may affect project implementation.	Bank team will expedite due diligence to review the performance by the contractors and ensure adherence to the Bank safeguards policies and procedures. The grievance address mechanism will be used to make sure affected people can voice concerns.						
	Resp: Both	Status: Not Yet Due	Stage: Implementation	Recurrent: ☑	Due Date:	Frequency: Quarterly	
Program and Donor	Rating	Low					
Risk Description: There is a risk that donors willing to provide co-funding to the project will operate on different financial terms and follow different operational policies and procedures which may lead to misinterpretation of the rules and obligations of parties under contracts.	**Risk Management:** The Donor Coordinating mechanism will be set up to streamline various operational policies and procedures adherence to which is required by Donors. The project will ensure effective exchange of information among financiers involved in the project.						
	Resp: Both	Status: Not Yet Due	Stage: Implementation	Recurrent: ☑	Due Date:	Frequency: Quarterly	
Delivery Monitoring and Sustainability	Rating	Moderate					
Risk Description: Given the project will have results indicators designed to measure increased connectivity and movement of people and goods across borders, MoT and direct implementing agents may not have capacity to moni-	**Risk Management:** The Project will finance the recruitment of a monitoring and evaluation and public relations specialist during the entire length of project implementation as part of the PIG. Additionally, it is proposed to hire an independent civil society organization or firm to help with the implementation of beneficiary surveys during implementation of the project.						
	Resp: Both	Status: Not Yet	Stage: Imple-	Recurrent: ☑	Due Date:	Frequency: Yearly	

tor results and impacts of the project beyond supervision of contracts. There may be a risk of poor sustainability of benefits of the project intervention due to inadequate capacity and budget allocated to the MoT for maintenance works.		Due	men-tation			
	Risk Management: The project will develop a road database and design a Highway Information System which will contain a set of evaluation tools to evaluate the network data at project or network level for monitoring, planning and programming purposes. The HIS will serve the needs of many MOT units and will be used for informed decision making on prioritizing maintenance works given limited capacity and recourses of MoT.					
	Resp: Both	Status: Not Yet Due	Stage: Both	Recurrent: ☑	Due Date:	Frequency: Yearly

Overall Risk

Overall Implementation Risk: High

Risk Description:

The Decision Meeting requested to upgrade the overall implementation risk of the project from "substantial" to "high" given high risk country context, relative volatile situation in the Fergana valley, and continued social tensions along the border between the Kyrgyz Republic and Tajikistan. Additionally, this will be the first major intervention in the transport sector in Tajikistan by the Bank.

Annex 5: Implementation Support Plan

CENTRAL ASIA:
Central Asia Road Links – Republic of Tajikistan (CARs-2)

Strategy and Approach for Implementation Support

The strategy for implementation support has been developed based on the nature of the project and its risk profile. It will aim at making implementation support to the client more flexible and efficient, and will focus on implementation of risk mitigation measures defined in the Operational Risk Assessment Framework (ORAF), namely the delivery quality and design risk which are rated as moderate, as well as the traditional supervision focus areas including safeguards and fiduciary aspects.

Formal supervision and field visits will be carried out semi-annually, and will focus on:

(i) **Technical inputs**. Engineering inputs are required to review bid documents to ensure fair competition through proper technical specifications and fair assessment of the technical aspects of bids. An experienced highway engineer will review the detailed designs for the civil works related to road rehabilitation. During construction and commissioning, close technical supervision will be provided to ensure technical, environmental and social contractual obligations are met. The team's engineer will conduct site visits on a semi-annual basis throughout project implementation. Inputs will also be provided by a transport specialist/economist on the support towards improvement of road operations and maintenance practices, and the proposed technical assistance and studies.

(ii) **Fiduciary requirements and inputs**. Training will be provided by the Bank's financial management specialist and the procurement specialist during project implementation. The team will support MoT and its PIG in their financial management capacity and to improve procurement management efficiency. The financial management specialist and the procurement specialist will both be based in the country office to provide timely support. Supervision of financial management arrangements will be carried out semi-annually as part of the project supervision plan and support will be provided on a timely basis to respond to client needs. Procurement supervision will be carried out on a timely basis as required by the client. Concerning financial management, the World Bank will conduct risk-based financial management implementation support and supervision within six months from the project effectiveness date, and then at appropriate intervals, as part of its project implementation and supervision missions. During project implementation, the World Bank will supervise the project's financial management arrangements in the following ways: (i) review the project's quarterly IFRs as well as the project's annual financial statements and the auditor's management letters and remedial actions recommended in the auditor's management letters; and (ii) during the World Bank's on-site missions, review the following key areas: (a) project accounting and internal control systems; (b) budgeting and financial planning arrangements; (c) disbursement arrangements and financial flows, including counterpart funds, as applicable; and (d) any incidences of corrupt practices involving project resources. As required, a World Bank-accredited finan-

cial management specialist will participate in the implementation support and supervision process.

(iii) **Safeguards.** The environment and social specialist will support relevant counterpart staff and provide any necessary training. On the social side, supervision will focus on the implementation of the RPF and potential Resettlement Action Plans (RAPs), if needed, and the social and poverty-related benefits associated with the road rehabilitation. Field visits will be made on a semi-annual basis. The social and environmental specialists will ideally both be based in the country office to ensure close follow-up.

(iv) **Client Relations**. The Task Team Leader will coordinate the Bank team to ensure project implementation is consistent with Bank requirements, as specified in the legal documents. He/she will meet with senior officials on a regular basis to keep them apprised of project progress and issues requiring resolution at their level. The Task Team Leader will also discuss readiness and interest with potential participant countries in the program, and liaise as necessary with the CAREC and other stakeholders.

Implementation Support Plan

The main focus in terms of support to implementation would be as follows:

Time	Focus	Skills Needed	Resource Estimate (Staff Weeks/year)	
First twelve months	Team Leadership	Management, supervision, coordination, dialogue with potential country members of program	Task Team Leader	8
	Project Support	Supervision, coordination	Operations Officer in-country	6
	Technical	Road engineering, design, technical supervision	Road Engineer Transport Specialist/Economist	4 4
	Social	Social safeguards, land acquisition and resettlement, gender and poverty	Social Specialist	3
	Environment	Bank norms knowledge, environmental safeguards	Environmental Specialist	3
	Procurement	Procurement experience, Banks procurement norms knowledge, training	Procurement Specialist	4
	Financial Management	FM experience, knowledge of Bank FM norms, training	FM Specialist	4
12-48 months	Team Leadership	Management, supervision, coordination, dialogue with potential country members of program	Task Team Leader	8
	Project Support	Supervision, coordination	Operations Officer in-country	6
	Technical	Road engineering, supervision	Highway Engineer Transport Specialist/Economist	4 3
	Social	Social safeguards, land acquisition and resettlement, gender and poverty	Social Specialist	3
	Environment	Environmental safeguards, supervision and monitoring, training as needed	Environmental Specialist	3
	Procurement	Procurement reviews and supervision, training as needed	Procurement Specialist	4

	Financial Management	FM reviews and supervision, training and monitoring	FM Specialist	4
48-60 months	Team Leadership	Project management, supervision, coordination	Task Team Leader	8
	Project Support	Supervision, coordination	Operations Officer in-country	6
	Technical	Road engineering, supervision, trade facilitation expertise	Highway Engineer Transport Specialist/Economist	3 3
	Social	Social safeguards, land acquisition and resettlement, gender and poverty	Social Specialist	3
	Environment	Environmental safeguards, supervision and monitoring, training as needed	Environmental Specialist	2
	Procurement	Procurement reviews, training as needed	Procurement Specialist	4
	Financial Management	FM reviews, training and monitoring	FM Specialist	4

The following skills mix is required for implementation support:

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Task Team Leader	8 Staff Weeks/year	Two/year	HQ based
Operations Officer	6 Staff Weeks/year	Two/year	Field based
Highway Engineer	3-4 Staff Weeks/year	Two/year	Field based
Transport Specialist/Economist	3-4 Staff Weeks/year	n/a	HQ based
Social Specialist	3 Staff Weeks/year	Two/year	Country based
Environmental Specialist	3 Staff Weeks/year	Two/year	Country based
Procurement Specialist	4 Staff Weeks/year	n/a	Country based
FM Specialist	4 Staff Weeks/year	n/a	Country based

Annex 6: Economic Analysis of the Program and Project

CENTRAL ASIA:
Central Asia Road Links –Republic of Tajikistan (CARs-2)

The Economic Impact of the Connectivity Program

The key question in measuring the economic impact of any intervention is to decide on the scope of the analysis: In theory, a cost-benefit analysis (CBA) should identify the costs and benefits to whoever and wherever they accrue. Ideally, a comprehensive assessment would measure the wider economic impacts (static) on welfare, revenue, and eventually trade. Beyond intuition, no robust conceptual framework has been developed so far to measure improvement in connectivity brought by transport projects. However, macroeconomic estimates have shown strong positive links between the aggregate levels of connectivity-enhancing or trade cost reduction measures and investments and economic performance as measured by GDP or productivity growth or employment. But the models and reasoning used (e.g., gravity, Computable General Equilibrium (CGE)) do not incorporate micro-economic benefits of individual projects and are hardly applicable to economic appraisal of projects.

Current models uses in CBA capture direct user benefits in form of cost savings to operators (e.g. HDM-IV model) or consumers (e.g. total logistics costs). A new methodological approach has been experimented with which lies between the micro and macro-level of approach and assesses the impact (static) based on a connectivity description of the effect of the project. The model developed combines (i) modern gravity modeling of interaction between regions served by the road links and (ii) simplified (partial equilibrium) description of how the economies of these entities work. The benefits are expressed in terms of surplus or consumer and producers living in the Sugd Oblast.

The CARs program improves road connectivity between several relatively densely populated areas in Central Asia, located in the Fergana valley, and belonging to three countries: the Republic of Tajikistan, the Kyrgyz Republic, and the Republic of Uzbekistan. These include:

- The Sugd region in the Republic of Tajikistan
- The Batken Oblast in Kyrgyz Republic
- The Osh Oblast in Kyrgyz Republic
- The cities and regions in the Uzbek Eastern Panhandle: Andijan, Fergana.

Eventually these regions link beyond Osh to the rest of the world through Kazakhstan and China (from Osh directly to Xinjiang, or through Almaty). The network is also a major transit route for the rest of the Republic of Tajikistan in the South. Investments in road rehabilitation in this part of Central Asia have been lagging as the current infrastructure is in a very poor condition, with significant negative impact on a relatively dense area with relatively high traffic volumes for the region. CARs-2 and in general the entire program addresses those gaps. Improvements in border crossing are also important to limit delays and congestion; this component is being addressed by a complementary project led by ADB, the Regional Improvement of Border Services Project.

Sugd Oblast in the Republic of Tajikistan is a rural area, but close to urban areas of the Fergana valley, in the Kyrgyz Republic (Osh) and Uzbekistan. Despite borders, Sugd is quite closely integrated to its neighbors and for instance supplies agricultural goods, including some processed

or packaged for exports (e.g. dry fruits, or fresh fruits). The project is expected to enhance this integration in a way which will increase the welfare in Sugd. Better road conditions are expected to facilitate the shipments from the farm and reduce the losses en route. Conversely, from a consumer perspective, better connectivity will lower the cost of manufactured goods imported into Sugd.

The transit trade to Kyrgyz Republic (from Afghanistan, China or Kazakhstan) and the energy trade are excluded in the analysis, at this stage. The CARs-2 project targets a relatively small section of the typical road transit route. The gains are primarily reduction in logistics costs for shippers at the end of the transit route; hence the main beneficiaries are economic units in the Republic of Tajikistan.

The improvement in physical connections brought by CARs-2 brings wider economic benefits through at least two channels: on the one hand trade and commerce and on the other hand human mobility (including cross-boundary labor and services for instance). This analysis focuses on the benefits brought to the population of the Oblast through the first channel, i.e. trade. The facilitation of trade in goods as the main result of the project reduces the cost of transportation and logistics in the region.

The intensity of the flows (trade or mobility) on the link of the networks depends on (i) the friction (trade costs) between the nodes and (ii) the importance of each of the nodes at origin and destination (gravity concept). In trade theory there is an explicit relationship (power law) between generalized costs on each link and the friction or impedance that determines trade flows. The exponent corresponds to an elasticity of substitution between locations (typically quite high, such as 8).

Connectivity of a node (region) on the network measures how well a node interacts with the entire network. It is defined for origins (respective for destinations) as the normalized gravity pull (respective push) received from the rest of the network.

Incremental changes in cost on a link correspond to a change in friction or impedance on the same link. Generalized trade costs can be estimated from micro level transport or supply chain models (HDM, Total Logistics Costs). Generalized costs include costs of transportation and the value of time (depreciation, inventory costs).

The benefits to producers and consumers at a particular node location are estimated using the following sequence:

1. Incremental changes in costs determine incremental changes in connectivity.
2. Incremental changes in connectivity determines changes in surplus according to the rule:

$$\begin{pmatrix} Relative\ \ Change \\ in\ \ Surplus \end{pmatrix} = \frac{1}{\sigma - 1} \begin{pmatrix} Relative\ \ Change \\ in\ \ Connectivity \end{pmatrix}$$

where σ is the elasticity of substitution.

The expected data to run the model include:

- Matrix of existing flows for each relevant trade or mobility layers (section 3)

- Changes in costs or friction brought by the project (section 4)
- Some very rough hypothesis on the production function (e.g. share of tradable vs. non tradable goods and services), labor mobility.

The application to the Sugd Oblast differentiates two layers between agriculture and manufactured goods, which have very different patterns and also quite different sensitivity to time. Most benefits come from increased trade in agricultural products (producer surplus) and better accessibility to consumer goods (consumer surplus). The annual wider benefits are in the range of 1.8 and 2.5 percent of regional GNI. Those estimates do not include the benefits for transit trade to the rest of the country nor energy trade.

Economic Analysis (Cost-Benefit) of CARs-2

The project development objective (PDO) of the Second Phase of the Central Asia Road Links Program (CARs-2) is to increase transport connectivity between the Republic of Tajikistan and its neighboring countries along priority cross-border road links whilst supporting improvements in road operations and asset management practices. The program is expected to have substantial positive impacts on poverty reduction and economic growth, not only because of the high population density along the catchment area of the cross-border road links, but also high poverty rates and related impacts on cohesion and migration. The Guliston/Kyzyl-Bel and Madaniyat/Kairagach BCPs road and its links with its total length of about 180 km in the Republic of Tajikistan runs along the Fergana Valley, basically across the territory of Sugd oblast in parallel with the state border of the Republic of Tajikistan and Kyrgyz Republic. A few of the sections of the road have been rehabilitated recently, whilst most sections remain untouched in poor condition. The table below presents the road sections to be rehabilitated/ constructed under the project with a total length of approximately 70 kilometers (67.7 km).

Table 1. Project Road Sections

No.	Location	Length (km)	Road Class	2014 Traffic (vpd)	2014 Roughness (IRI, m/km)
1	Guliston BCP- Isfara (Isfara Bypass)	18.2	III	1,720	6.7
2	Isfara - Kim	13.0	III	2,688	5.1
3	Kim - Kanibadam	10.0	III	1,462	4.5
4	Kanibadam - Patar BCP	5.7	II	2,007	5.8
5	Kim - Kuchkak	13.9	III	1,871	6.8
6	Dehmoi - Proletarsk and Access to Intermodal Terminal (2.2 km)	7.9	III	6,138	6.7
7	Proletarsk - Mandaniyat BCP	9.0	III	3,551	7.0
Total		67.7		2,514	6.1

Length of existing Guliston BCP- Isfara road is 17.6 km

In 2014, an economic analysis for the rehabilitation of all road sections was carried out by Kocks Consult GmbH as part of the preparatory studies for the proposed project which was used as the basis for this analysis based on updated engineering cost estimates and current GDP growth projections for the Republic of Tajikistan.

Assumptions and Inputs

The project aims to increase transport connectivity between the Republic of Tajikistan and its neighboring countries along priority cross-border road links whilst supporting improvements in road operations and asset management practices. This will bring direct benefits to road users arising from a reduction in vehicle operating costs, passenger time costs and maintenance costs as a consequence of improving ride quality. The improvement of the road links will also have a major impact on communities living in the vicinity of the road through stimulation of economic activity in the region and provision of better access to non-farm employment opportunities, local markets and basic social services. However, these benefits were not included in the economic analysis because they are difficult to quantify in monetary terms.

The economic analysis was conducted using the Highway Development and Management Tool (HDM-4), which simulates life-cycle predictions of road deterioration, road works effects and their costs and road user costs, and provides economic decision criteria for road construction and maintenance works. The HDM-4 analyzes projects by computing costs and benefits of different investment options in terms of savings in road maintenance costs, vehicle operating costs and travel time costs. The comparison is done between the "do something" scenario (project case) and the "do minimum" scenario (without project case) over the analysis period. The "do minimum" scenario incorporates an assessment of what would happen if the project was not undertaken; therefore consists of the recurrent maintenance practice and reconstruction when the road reaches very poor condition at 12 IRI, m/km. The project scenario consists of the rehabilitation, improvement or new construction works followed by proper recurrent maintenance and periodic maintenance works over the analysis period consisting of 6 cm overlays triggered at 4 IRI, m/km.

The economic analysis was conducted for the road to be financed under the project through the analysis of seven separate road sections divided according to their characteristics; condition and traffic covering 67.7 km (see Table 1). Most of the road sections will be rehabilitated; while the Guliston BCP-Isfara road section represents the construction of the Isfara bypass road. The table below presents the estimated financial investment cost per road section excluding VAT. Economic costs are 75 percent of the financial costs including VAT.

The roads to be rehabilitated are in poor condition with a measured roughness done in 2014 varying from 4.5 to 7.0 IRI, m/km and an average of 6.1 IRI, m/km. Current traffic data was obtained from traffic surveys undertaken by Kocks Consult GmbH in 2014. The average traffic of the project roads is 2,514 vehicles per day. Normal growth is driven by economic development best represented by growth in real Gross Domestic Product (GDP). The IMF's GDP growth forecasts for Republic of Tajikistan from 2014 to 2018 (on average 5.8 percent per year) have been used as a starting point for the development of the best estimate growth forecasts for the national economy. The strong relationship between economic growth and traffic growth is widely recognized, and cars and other light passenger vehicle traffic are generally considered to grow slightly faster than GDP, while the growth of goods vehicle traffic, being driven directly by the economy, is commonly in line with GDP growth. Accordingly, an elasticity of 1.10 for car and passenger traffic has been adopted together with a conventional value of 1.0 for goods vehicles. The resulting adopted traffic growth rates are summarized in Table 2 below.

Table 2. Normal Traffic Growth Rate Projections

	From	To	Percent
GDP Growth Rate Projections	2014	2019	5.80
	2020	2025	5.00
	2026	2030	4.00
	2031	2037	2.80
Passenger Vehicles Growth Rate Projections	2014	2019	6.40
	2020	2025	5.20
	2026	2030	4.20
	2031	2037	3.00
Goods Vehicles Growth Rate Projections	2014	2019	5.80
	2020	2025	5.00
	2026	2030	4.00
	2031	2037	2.80

Table 3 below presents the vehicle fleet characteristics and economic unit costs adopted on the analysis, in 2014 US$ prices, for seven vehicle types. Unit costs were calculated net of taxes and transfer payments to arrive at economic values. The 2014 value of working time was computed based on the average wage of about US$1.04 per hour. The average value of working time over the analysis period (US$1.31 per hour) was computed assuming the inclusion of 25 percent non-wage costs.

Table 3. Vehicle Fleet Economic Unit Costs and Basic Characteristics

	Car	Pickup	Small Truck	Medium Truck	Heavy Truck	Artic. Truck	Mini Bus
Economic Unit Costs							
New Vehicle Cost (US$/vehicle)	17,816	22,141	22,965	26,260	36,043	76,411	21,626
New Tire Cost (US$/tire)	49.00	69.00	77.00	109.00	241.00	241.00	85.00
Fuel Cost (US$/liter)	0.95	0.95	0.89	0.89	0.89	0.89	0.89
Lubricant Cost (US$/liter)	2.73	2.73	2.73	2.73	2.73	3.73	2.73
Maintenance Labor Cost (US$/hour)	5.14	5.14	5.14	5.14	5.14	5.14	5.14
Crew Cost (US$/hour)	3.86	5.65	6.94	6.94	6.94	6.94	5.65
Overhead (US$/year)	628	2094	2199	2617	3141	6806	2094
Interest Rate (%)	12	12	12	12	12	12	12
Working Passenger Time (US$/hour)	1.31	1.31	1.31	1.31	1.31	1.31	1.31
Non-working Pass. Time (US$/hour)	0.43	0.43	0.43	0.43	0.43	0.43	0.43
Cargo Delay (US$/hour)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Basic Characteristics							
Kilometers Driven per Year (km)	23,000	30,000	40,000	40,000	86,000	86,000	34,000
Hours Driven per Year (hr)	550	1,300	1,300	1,200	2,050	2,050	850
Service Life (years)	10	8	8	12	14	14	8
Percent Private Use (%)	100	0	0	0	0	0	0
Number of Passengers (#)	1.5	3.3	0.6	1	0.3	0.4	5.3
Work Related Passenger-Trips (%)	25	25	50	75	75	90	25
Gross Vehicle Weight (tons)	1.2	1.8	3	7.5	13	28	2.5
Equivalent Standard Axels (ESA)	0	0.01	0.2	0.52	1.69	2.24	0.01
Typical Traffic Composition (%)	64.6%	9.7%	10.4%	8.6%	3.5%	2.2%	1.1%

Table 4 below presents the estimated unit road user costs (vehicle operating costs plus travel time costs), in US$ per vehicle-km, for different roughness levels. A road with roughness equal to 2 IRI, m/km, is in good condition, from 4 to 8 IRI, m/km, is in fair condition and from 8 to 12

IRI, m/km, is in poor condition. On average, unit road user costs decrease by 20 percent if the roughness decreases from 10 to 2 IRI, m/km, after the rehabilitation works.

Table 4. Unit Road User Costs Function of Roughness (US$ per vehicle-km)

Roughness (IRI, m/km)	Car	Pickup	Small Truck	Medium Truck	Heavy Truck	Artic. Truck	Mini Bus
2	0.25	0.37	0.33	0.42	0.68	1.05	0.34
4	0.25	0.38	0.35	0.44	0.70	1.11	0.35
6	0.26	0.41	0.37	0.46	0.74	1.17	0.37
8	0.28	0.45	0.40	0.49	0.76	1.23	0.40
10	0.30	0.50	0.43	0.52	0.81	1.34	0.43
12	0.32	0.56	0.47	0.57	0.88	1.47	0.48

The project roads have a current vehicle utilization of 77.5 million vehicle-km per year representing fuel consumption of around 9.4 million liters per year, which generates around 23,300 tons of CO2 emissions per year. The project will lead to increased CO2 emissions to the air environment. This is due to additional traffic generated by the rehabilitation works and increase in vehicle speeds and fuel consumption after the rehabilitation works. Over the evaluation period, CO2 emissions are estimated to increase by 21 percent compared to the without project scenario.

The proposed investments were evaluated over the period 2015 to 2036, accounting for 20 years of project benefits after the two year construction period, at a 12 percent discount rate.

Economic Evaluation Results and Sensitivity

The return on the investments of the project roads is satisfactory with an overall EIRR of 16.7 percent, Net Present Value (NPV) of US$25.3 million at a discount rate of 12 percent, and Benefit Cost Ratio of 1.5. The EIRR of individual road sections varies from 12.8 to 26.8 percent. Switching values analysis shows that construction costs would have to increase by 47 percent for the project EIRR be reduced to 12 percent. The results of the economic analysis are presented in Table 5 below.

Table 5. Economic Analysis Results

No.	EIRR (%)	NPV (M US$)	PV Cost (M US$)	PV Benefits (M US$)	B/C Ratio
1	14.6%	3.2	12.4	15.6	1.3
2	20.5%	7.0	5.7	12.8	2.2
3	14.9%	1.7	5.5	7.1	1.3
4	12.8%	1.1	12.9	14.0	1.1
5	16.6%	3.4	6.3	9.6	1.5
6	26.8%	5.8	6.1	11.9	1.9
7	20.1%	3.2	4.9	8.1	1.6
Total	16.7%	25.3	53.7	79.1	1.5

A sensitivity analysis was carried out to assess the robustness of the results to possible variations in key project parameters, which in this case were identified as construction costs and the forecast traffic growth rates. A severe worst case scenario with construction costs increased by 15 percent and traffic growth rates benefits decreased by 15 percent still shows a reasonable return

for the program with an EIRR of 13.9 percent. If the economic costs of CO2 emissions are included on the economic evaluation, assuming an economic cost of CO2 emissions of US$15 per ton, the ERR of the project reduces marginally to16.5 percent, indicating that the road user costs benefits outweigh the emission costs. The results of the sensitivity analysis are presented in Table 7 below.

Table 6. Sensitivity Analysis Results

No.	Base EIRR (%)	A: Cost 15% (%)	B: Traffic Growth -15% (%)	C: A & B (%)
1	14.6%	13.0%	13.6%	12.0%
2	20.5%	18.8%	19.4%	17.8%
3	12.8%	13.4%	13.9%	12.4%
4	14.9%	11.4%	11.8%	10.4%
5	16.6%	15.0%	15.5%	14.0%
6	26.8%	23.5%	25.7%	22.4%
7	20.1%	17.7%	19.0%	16.7%
Total	16.7%	14.9%	15.7%	13.9%

Public Sector Financing and World Bank Added Value

Public sector financing is the appropriate vehicle for financing the rehabilitation of proposed roads because the construction costs cannot be recovered through tariffs due to relatively low levels of traffic along the project roads. Public investment in road infrastructure is desirable because it is a way the government plays a key role in the country's development by handling a range of issues that can only be accomplished or implemented through government actions, such as axle weight controls and road safety regulations. The World Bank's role is justified because of the project's economic and social benefits and because of the value added it brings beyond financing in areas such as: construction quality control, sustainability of road maintenance, transport planning, environmental risk management, safeguards, procurement, and financial management.

Social Benefits

It is expected that the project will lead to improvements in transport connectivity between the Republic of Tajikistan and its neighboring countries along priority cross-border road links in Sugd Oblast. By improving connectivity, the proposed project expects to increase access of local population to local and regional markets, services and employment opportunities, particularly for less wealthy population (or bottom 40 percent). While Sugd Oblast is not considered as the poorest region, however due to the size of population, absolute majority of poor people is concentrated in Sugd and Khatlon oblasts, with their highest population density in the country. According to the World Bank's recent study[23], it is more likely that the bottom 40 percent of population lives in rural areas of Sugd and Khatlon. As estimated, about 650,000 people, or 27.6 percent of total bottom 40 of the country are from Sugd[24]. By improving mobility and reducing transaction

[23] WB, *Results Framework and M&E Guidance Note*, 2013
[24] WB, *Poverty Reduction and Shared Prosperity in Tajikistan: A Diagnostics*, 2014

cost for travelling, almost ¼ of bottom 40 percent of the country, therefore, can benefit from the project. A detailed assessment on the impact of the project on poverty and welfare was agreed to be done during the implementation of the project (component 3) with support from the construction supervision consultant who will be responsible to lead the preparation of the methodology and data collection for before and after project interventions.

The project roads are located at the Tajikistan Sugd region (2.30 million population or 29 percent of the Tajikistan population). Its administrative center is Khujand city (165,300 population). The majority of the Sugd region population is Tajik, as well as Uzbek, Russians, and Kyrgyz. The project direct beneficiaries are persons living in the cities of Khujand, Isfara, Kanibadam, Kairakkum, and Chkalovsk (327,600 persons) that are served by the project roads. The indirect beneficiaries are persons living in the Bobojon Gafurov, Isfara, and Kanibadam districts (655,900 persons) where the project roads are located. The total beneficiary population is 983,500 persons that represent 43 percent of the population of the Sugd region, as shown in Table 7.

Table 7: Project Beneficiary Population

Location	Population
Khujand city	165,300
Isfara city	44,100
Kanibadam city	47,300
Kairakkum city	41,500
Chkalovsk city	29,400
Bobojon Gafurov district	325,100
Isfara district	192,800
Kanibadam district	138,000
Total Beneficiaries	983,500
Sugd Region Total	2,302,800
Tajikistan Total	7,800,500

Source: State Statistical Committee, Tajikistan, 2012

Tajikistan was one of the fastest growing countries in the Europe and Central Asia region during the last decade. The economic growth was widely shared by the population and as a result poverty (measured by the national poverty line) declined from 73 percent in 2003 to 47 percent in 2009 (see Table 9) accompanied by falling inequality. Consumption growth of the bottom 40 percent of the population—a measure of shared prosperity proposed by the World Bank- was positive, pointing out that the growth was shared among the less well off. Nevertheless, the level of poverty is still very high. Further poverty reductions along with improvement of living standards are priority goals for the Government of Tajikistan. The positive trends in poverty reduction were observed in urban and rural areas, but after 2007 rural poverty reduction slowed down. As a result, the gap in poverty rates between urban and rural areas widened in 2009. Inequality was not very high in Tajikistan and has falling gradually. Inequality in consumption per capita, measured by the Gini coefficient, declined in Tajikistan from 0.33 to 0.31 between 2003 and 2009 respectively. Compared to other poor ECA countries, inequality is not high in Tajikistan. It is on a comparable level with Moldova, and is lower than what is observed in the Kyrgyz Republic and Georgia. Figure 1 presents maps with the 2007 poverty rates and poverty densities in Tajikistan and Kyrgyzstan.

The latest poverty indicators available at oblast level are from the 2009 Tajikistan Living Standards Survey (TLSS). From 2003 to 2009, poverty rates dropped substantially in all regions. Pov-

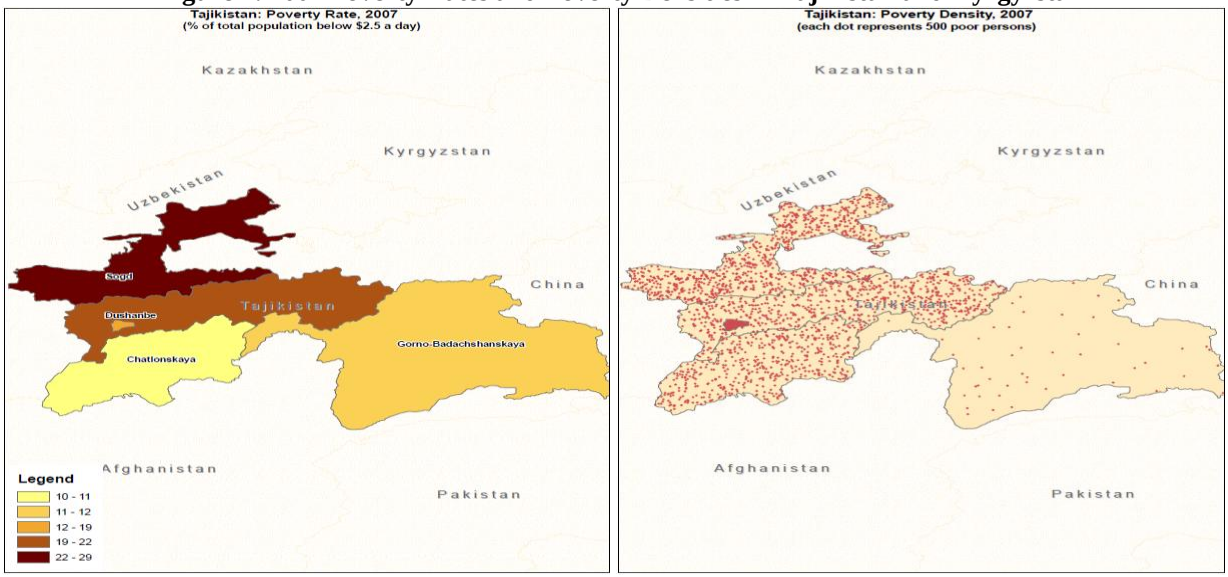
erty rates dropped most in the Khatlon oblast (30 percentage points) followed in the Sugd oblast (28 percentage points). People in Tajikistan are most likely to be poor if they live in the Khatlon oblast or Gorno-Badakhshan autonomous oblast (GBAO). The Sugd oblast has the third highest poverty rate in Tajikistan, however due its large population the share of the total poor people of Tajikistan living in the Sugd oblast is 30 percent. The fall in poverty at the national level was driven by economic growth, with an average increase of Gross Domestic Product (GDP), at constant prices, of 7.7 percent annually from 2003 to 2009. The country has grown very fast during the 2000s and due to effective mitigating measures; the social impacts of the 2008-2009 world financial crisis were minimized. From 2010 to 2014, the average increase of GDP was 6.8 percent annually.

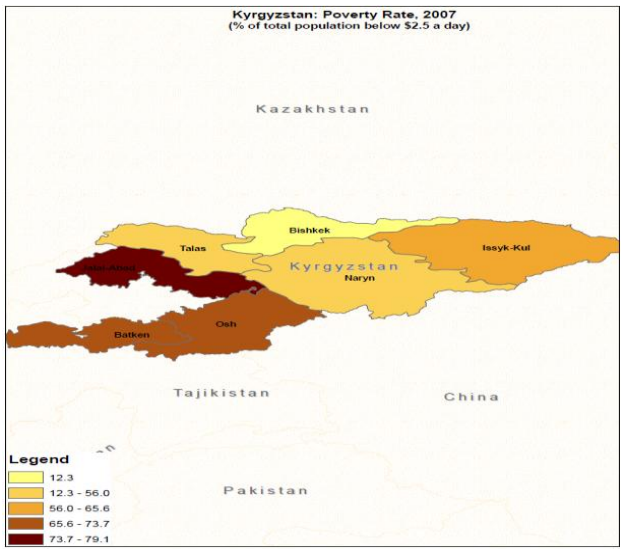
Table 8: Tajikistan Poverty Indicators

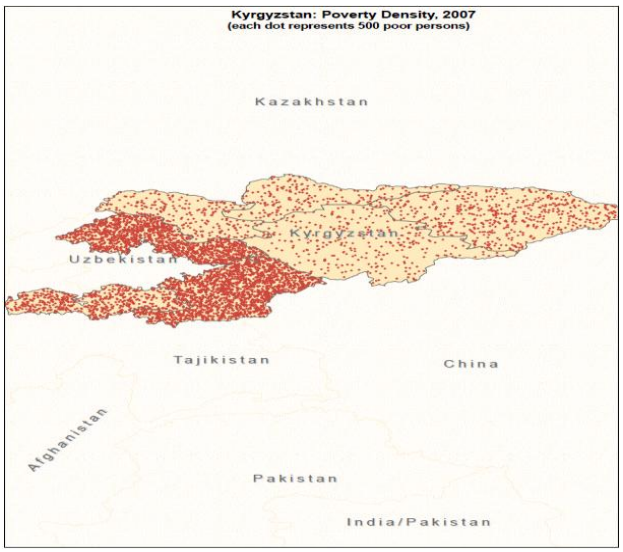
Oblast	Poverty Rates 2003	Poverty Rates 2009	Poverty Rate Decline 2003 - 2009 Percentage Points	2010 Population Total (persons)	2010 Population Poor (persons)	Share of Poor (%)
Dushanbe	56	34	-22	724,844	245,722	7%
Sugd	76	48	-28	2,233,550	1,078,805	30%
Khatlon	84	54	-30	2,677,251	1,443,038	40%
RRP	57	39	-18	1,722,908	670,211	19%
GBAO	83	62	-21	205,949	127,482	4%
Tajikistan	73	47	-25	7,564,502	3,565,259	100%

The poverty rates refer to the proportion of population living under poverty line.
The poverty line is set at 162 Somoni per month using 2009 prices.

Figure 1: 2007 Poverty Rates and Poverty Densities in Tajikistan and Kyrgyzstan




Kyrgyzstan: Poverty Rate, 2007
(% of total population below $2.5 a day)
Kazakhstan
Bishkek
Talas
Issyk-Kul
Kyrgyzstan
Naryn
Batken
Osh
Tajikistan
China
Pakistan
Legend
12.3
12.3 - 56.0
56.0 - 65.6
65.6 - 73.7
73.7 - 79.1


Kyrgyzstan: Poverty Density, 2007
(each dot represents 500 poor persons)
Kazakhstan
Kyrgyzstan
Uzbekistan
Tajikistan
China
Afghanistan
Pakistan
India/Pakistan

Annex 7: Road Transport Sector Background

CENTRAL ASIA:
Central Asia Road Links – Republic of Tajikistan (CARs-2)

The State Program on Transport Sector Development 2010-2025 addresses all aspects of the transport sector, and in particular the issue of asset management. The program's main task is to ensure reliable, efficient, and integrated transport operations and thereby facilitate social and economic development. This will be achieved through improvement of service levels and minimization of transport costs, by upgrading road, railway and air facilities. The program will be based on the findings of international financial institutions and transport experts and is aimed at (i) providing infrastructure that can minimize total transport costs; (ii) facilitating the development of specific transport modes, with a view to enhancing their efficiency; (c) facilitating the transit potential of the country, and developing the Republic of Tajikistan's tourism potential; and (d) increasing the competitiveness of internal and international transport services. Transport sector priorities are presented in Table 1.

Table 1: Sector Priorities according to the State Program on Transport Sector Development 2010-2025

Road Transport	Railways	Civil Aviation
Maintain existing infrastructure Introduce taxes and/or user charges sufficient to recover road damage costs Update and streamline technical standards, and the legal and regulatory framework Ensure open entry to passenger and freight service markets Reduce border and/or visa formalities Regulate safety via vehicle inspections and policing Regulate environmental pollution Be specific and transparent about subsidies Improve transparency to promote private sector involvement Introduce a public consultation system Improve the compulsory insurance system Introduce international environmental standards into daily transport infrastructure operations	Focus on commercial activities and core businesses Separate core and non-core activities Introduce feasibility studies for all capital investments Set clear costing systems for each line and/or section and service type Liaise with neighboring countries to improve efficiency Implement the individual restructuring plan of the State Unitary Enterprise	Concentrate on core business Dispose of all unused assets Ensure open access to passenger and freight service markets, subject to strict safety regulations Be specific and clear about subsidies Follow a transparent procurement process Allow the private sector to bid Compete in an open market with other private sector operators Renovate the aircraft fleet and aeronautical facilities of the chief flight-control center (Tojik Aeronavigation) Continue civil aviation restructuring and reform and strengthen the legal and regulatory basis to build a competitive environment for new market participants. Renovate the air fleet with new generation aircraft and upgrade air traffic control
Establish consistent and reliable base data on passenger and freight movements, and publish these together with realistic traffic forecasts Institutionalize merit-based recruitment and promotion Develop intermodal transport through (i) provision of short-term investments for the procurement of the relevant equipment and (ii) development of shipping agents capable of intermodal operations Introduce an automated control system for passenger transport, based on the Global Positioning System.		

Mountainous and landlocked, the Republic of Tajikistan has one of Central Asia's least developed transport sectors and among the world's highest transport costs. Transport costs are 30–50

percent higher than average because of the country's remoteness from seaports, and are increasing as a result of poor transport infrastructure and facilities, which discourages potential trade and transit traffic. The Republic of Tajikistan borders Afghanistan for 1,206 kilometers (km), the People's Republic of China (PRC) for 414 km, the Kyrgyz Republic for 870 km, and Uzbekistan for 1,161 km, making regional cooperation a necessity to achieve sustainable economic growth. Since 2000, the Republic of Tajikistan has dramatically improved its transport infrastructure because of the rapid growth in regional trade, especially with the PRC and other Central Asian countries. The transport sector is endeavoring to meet soaring demand and overcome a chronic shortage of public funds for investment and maintenance.

Administration. The Ministry of Transport (MoT) is responsible for roads, railways, airports and for sector policy, regulation, planning, operations, and investment. MOT is divided into eight departments and is headed by a minister and three deputy ministers. It has received several technical assistance grants to improve its internal capacity. An assessment of staffing levels and constraints of the MoT has been carried out during project appraisal. Other government agencies are regularly involved in fiscal and strategic aspects of trasnport sector planning and oversight.

Road network condition. The Republic of Tajikistan inherited a large road infrastructure network from the former Soviet Union. MOT, the central governing body for the transport sector, has jurisdiction over 14,067 km of the network, comprising international (3,178 km), national (2,194 km) and local (8,700 km) roads. About 12,700 km of local roads not under MoT jurisdiction are mostly rural and farm roads, and industrial access roads. The road network of the Republic of Tajikistan in 2008 totaled 26,766 km. All roads are public property. Paved roads account for 28 percent, bitumen-treated gravel roads for 45 percent, and gravel roads without bitumen treatment for 27 percent. The road network was constructed before 1970, and is mostly inadequate for present traffic volumes and loads. Moreover, about 80 percent of the nation's roads are in poor or very poor condition, mainly because of inadequate maintenance and severe damage (which was barely repaired) during the civil conflict. The country has very limited links to neighboring countries, especially Afghanistan and the PRC. This is being improved with development partner assistance, and the contribution of road transport to economic growth, poverty reduction, and social development will be gradually restored. A commitment to road rehabilitation and maintenance should enable existing infrastructure assets to be maintained, and will generate economic benefits directly linked to regional interconnectivity.

Traffic growth. The Republic of Tajikistan's economic growth has increased the demand for transport services. Demand for road transport is outpacing that of other transport modes. Domestic freight transport uses roads in preference to airlines and railways, because the average freight haul distance is 22 km, which is much too short for efficient transport by air or rail. Passengers traveling within the country also overwhelmingly choose to travel by road. However, an analysis of highway status reveals that (i) nearly 75 percent of republican roads have completely or partially lost their pavement; (ii) 60–80 percent of the road network cannot be maintained without expansive rehabilitation; and (iii) the driving speed over about 48% of the road network should not exceed 35 km/hour. The 2008 Transport Sector Master Plan forecasts a 67 percent rise in vehicle ownership, from 3.3 vehicles per 100 people in 2008 to 5.5 vehicles per 100 people in 2015.

Road revenue and expenses. The government's central budgetary process for road funding is via the Ministry of Finance (MoF). MoT develops and implements public expenditure budgets for construction, repair, and maintenance of national roads. The Ministry of Economic Development and Trade determines the government and development partner funds for road construction. The Road Construction Central Administration collects information from the regional transportation divisions and the MoT's local repair and maintenance units (GUSADs). The road rehabilitation and maintenance budgets (US$700 per km for maintenance in 2012) fall short of what is required to sustain the existing road network. The government has increased the annual maintenance budget continuously, despite general fiscal constraints. State budget allocations for road maintenance increased from TJS13.5 million in 2004 to TJS46.8 million in 2012, but still account for only about a third of MoT's estimated maintenance needs. This budget outlay will increase by about 15 percent per year over the next 5 years.

Road transport industry. There are 229 road firms registered with the State Service on Transport, of which 61 are GUSADs. The State Service on Transport estimates that 20 international firms are regularly engaged in the road sector.

Road freight tariffs. Road freight tariffs have been completely deregulated, and road haulage organizations enter into agreements with customers at negotiated rates. Tariffs for passenger transport are still regulated. The MOT and the Ministry of Economic Development and Trade jointly establish passenger transport tariffs for buses, minibuses, and taxis for urban and long-distance services.

Vehicle overloading. Overweight vehicles cause undue wear of road pavement and bridges, and threaten road safety. MoT issued regulations limiting overweight vehicles to night travel during summer, but enforcement of Resolution 779 (29 December 2006) has been ineffective as a result of jurisdictional issues at border crossings and limited funds. Additional rules on vehicle weight standards are under review by the government as well as the ruling out of automated axle load control systems based on weight-in-motion technology.

Road safety. The Republic of Tajikistan's road accident fatality rate of 6.5 per 100,000 people (2009–2011) is the lowest among the Commonwealth of Independent States. The major causes of road accidents are the increased number of vehicles, poor road conditions and infrastructure, weak enforcement of road safety regulations, and inadequate driver education and behavior (driving under the influence of alcohol or drugs, high speed, and a low rate of seatbelt use). ADB is supporting the Government in the development of a road sector strategy and action plan to address accident blackspots.

There are several challenges in the road sector:

- **Constraints in resource allocation**: Projected capital expenditure for road rehabilitation is substantial, and the existing resource base is insufficient. The Republic of Tajikistan faces serious fiscal challenges, and greater fiscal prudence is called for under the International Monetary Fund's 2009 new debt limit framework. Road maintenance remains underfunded which causes continuing deterioration of the existing road network and infrastructure. There has been a recent effort to mobilize domestic resources to secure mainte-

nance funds through tolling. The MoT introduced a public–private partnership pilot scheme on the Dushanbe–Khujand–Chanak road (350 km) on April 1, 2010. Currently, the MoT is developing a strategy and program for outsourcing road maintenance to the private sector. The MoT wishes to examine the potential for employing performance-based maintenance contracting as a mechanism for outsourcing road maintenance. This is to be achieved under an ADB grant through the implementation of a pilot project that will trial a performance-based (level of service) approach to road maintenance. The MoT will finance the performance-based maintenance contract(s) through its regular road maintenance budget.

- **Weak institutional capacity**. Failure to optimally manage the road network is aggravated by inefficiencies resulting from inadequate legal, regulatory, and institutional frameworks, and transitioning management capacity. Vehicle overloading, weak road safety and ineffective border crossings further impact road access and condition, and thereby limit mobility.
- **Lack of data and analysis**. The lack of a functioning road databank with reliable information on traffic counts, road condition, and accidents hampers setting clear quantitative and measurable targets. One objective of the transport program is to (i) increase (a) the efficiency of government regulation based on the widespread use of information and communication technologies; and (b) transport safety on the basis of full, reliable online information on traffic status; and (ii) carry out operational analysis of the data obtained to develop strategic solutions. The transport program also includes monitoring system and planning system for export, import and transit carriage via territory of the Republic of Tajikistan, including traffic transit by transport corridors. This is currently being addressed by a grant provided by ADB.
- **Supply shortage**. There are many government-driven construction projects, and the demand for them is huge. The few existing local design and construction companies have weak technical and financial capacity. Procuring design and construction services from the market have proven difficult. To be able to outsource and procure all design, construction, and maintenance works from the market in the medium to long term, the government needs to strategically support development of human resources and the construction industry. Importantly, the available supply of professionals may not meet the demand, given the country's growth aspirations.

Investment Plan

Unpredictable investment streams threaten the country's ability to channel funds for infrastructure investments (including maintenance). Heavy dependence on external assistance in road infrastructure is likely to continue in the short term. Development of road infrastructure is a top government priority, with a road investment plan amounting to US$2.3 billion for 2010–2025. Total expenditures in the transport sector for 2010–2025 are estimated at US$8.5 billion, with US$835.7 million for short-term priorities, US$1,630.6 million over the medium term, and US$6,002.7 million in the long term. Roads will absorb US$2.3 billion, railways US$5.9 billion, and civil aviation US$0.3 billion.

Annex 8: Program Overview and Complementarities with other Projects

CENTRAL ASIA:
Central Asia Road Links – Republic of Tajikistan (CARs-2)

The proposed Central Asia Road Links (CARs) Program complements the on-going efforts of the countries in the region contained in the on-going Transport and Trade Facilitation Strategy and Action Plan for 2008-2017 which is endorsed by the Central Asia Regional Economic Cooperation (CAREC). This strategy foresees the rehabilitation of six strategic transport corridors in the Central Asia region based on their impact on economic growth and poverty reduction as highlighted by the recently development framework for the CAREC program 2011-2020 (CAREC 2020). The program has the aim to expand trade and improve competitiveness by developing "economic corridors" as well as improve trade facilitation. Within the trade facilitation component, cross-border transport agreements (CBTAs) between the Kyrgyz Republic, the Republic of Tajikistan and Afghanistan are being developed and implemented to ensure smooth flow of goods and people.[25]

The CARs program is the result of a collaborative effort initiated by respective governments in the Central Asia region which has been developed as a regional, multi-phase program considered under IDA17. The program which is considered to be transformational in nature has the overall objective to increase transport connectivity between neighboring countries in Central Asia along priority cross-border road links whilst supporting improvements in road operations and maintenance practices. The road links once rehabilitated will improve access along priority transport connections between major urban agglomerations within the Central Asia region, thereby supporting the creation of an integrated economic region across borders. In addition to each country's capital city, major urban agglomerations include cities such as: (a) Osh city, the second largest city in the Kyrgyz Republic in Osh Oblast, (b) Khujand, the second largest city in the Republic of Tajikistan within Sugd Oblast, (d) Almaty, the formerly capital of Kazakhstan until 1997 within Almaty Oblast, as well as (e) Andijan (Andijan Oblast), Fergana (Fergana Oblast) and Namangan (Namangan Oblast) in the Fergana valley.

The first phase of the CARs (CARs-1) with total financing from IDA in the amount of US$45 million equivalent is to increase transport connectivity between the Kyrgyz Republic and the Republic of Tajikistan along priority cross-border road links in Batken Oblast. Those cross-border links end at the Kyzyl-Bel-Guliston border crossing point as well as at the Kairagach-Madaniyat border crossing points, both at the border with the Republic of Tajikistan. The project is currently awaiting effectiveness.

The third phase of the CARs (CARs-3) is currently under discussion between the Government of the Kyrgyz Republic and the Republic of Kazakhstan with a view to increase transport connectivity between both countries in bordering Issyk-Kul Oblast (Kyrgyz Republic) with bordering Almaty Oblast (Republic of Kazakhstan). A letter exchange and preliminary discussions have been held between the governments. The total costs of required investments are estimated at this preliminary stage to amount up to US$100 million.

[25] See http://www.carecprogram.org/index.php?page=carec-corridors for a map of CAREC corridors.

The preparation of the fourth and fifth phase of the CARs (CARs-4 and 5) have not advanced as of today, but could potentially include road links to Afghanistan, Uzbekistan as well as Turkmenistan.

Additionally, the program complements other activities, financed by donors in the area of trade facilitation, customs and logistics. Those activities are presented herewith:

- **Customs Modernization and Border Management**, including the development of a unified automated information system (UAIS), border-post infrastructure, border inter-agency cooperation, border crossing points (including Guliston-Kyzyl-Bel and Karamyk border crossing points), and introduction of National Single Window (NSW) platform through the ADB-financed *Regional Customs Modernization and Infrastructure Development Project (KGZ), 2004-2013 (US$ 7.5 million) and Central Asia Regional Economic Cooperation (CAREC) Regional Improvement of Border Services Project (RIBS), 2013-2017 (US$ 17.6 million, excluding co-financing by Kyrgyzstan and the Republic of Tajikistan).*
- **Transit Regime and Cross-Border Agreement**: Phase I of an ADB-financed Technical Assistance provided support towards the preparation of cross-border agreement (CBA) between the Republic of Tajikistan and the Kyrgyz Republic connecting the countries along the CAREC Corridor 5. In Afghanistan, the corridor starts at Torkham at the border with Pakistan, continuing through Jalalabad to Kabul, Kunduz, and Shirkhan Bandar. From the Republic of Tajikistan's border crossing of Nizhni Pianj, Corridor 5 passes through Kurgan Tyube, Dushanbe, and Karamik. In the Kyrgyz Republic, it runs to the PRC border via Karamik, Sary Tash, and Irkeshtam.
- **Other trade facilitation related Technical Assistance:**
    - **ADB:** The Regional Trade Facilitation and Cooperation Program (2002-06) in the Kyrgyz Republic and Tajikistan (US$15 million and US$10 million, respectively); (ii) Regional Customs Modernization and Infrastructure Development Project (2005-present) the Kyrgyz Republic and Tajikistan (US$7.5 million and US$10.7 million, respectively); (iii) Technical Assistance: Integrated Trade Facilitation Support for Central Asia Regional Economic Cooperation (2007-present; US$3.0 million); (iv) Technical Assistance: Regional Trade Facilitation and Customs Cooperation (Phase II, 2004-09, US$900,000); (v) Technical Assistance: Preparing the CAREC Transport and Trade Facilitation Project: Border Crossing Point Improvement and Single Window Development (2011-12; US$2 million); and (vi) Technical Assistance: Formulating and Implementing an Intergovernmental Agreement of the Shanghai Cooperation Organization Member States on Facilitation of International Road Transport (2005-08; US$500,000).
    - **European Union:** Border Management Programme in Central Asia (BOMCA) with the aim to promote stability and security in Central Asia through Integrated Border Management and Regional Cooperation. It also supports regional economic development and trade facilitation through 4 components: a) institutional reform; b) enhancing professional skills, c) strengthening counter drugs capacities at borders, and d) border crossing and border outposts.
    - **Gesellschaft fuer Internationale Zusammenarbeit (GIZ) GmbH:** Program on "Support for Regional Economic Cooperation in Central Asia" (2005-2014) to help local partners in the public and private sector pursue 3 main objections: (i)

reduce the number of documents, the administration costs and the time needed to fulfill import and export administration requirements by at least 50 percent; (ii) Strengthen the capacity of the National Quality Infrastructure (Standards Office, testing laboratories, certification bodies, etc.) so that it can work to internationally recognized ISO standards; (iii) introduce modern quality management techniques to local industry.

- **OSCE:** Capacity building program for border management in Kyrgyzstan, including cross-border cooperation, customs training, document security, counter-narcotics and risk analysis, border security and management models, human trafficking, support to resource center on border delimitation and demarcation. The most recent project is "Enhancing the ability of the Kyrgyz Government to engage in regional cooperation in border security and management". The OSCE Centre in Bishkek assists the Kyrgyz authorities to develop a comprehensive long-term approach to border management.
- **TRACECA:** In 2001 TRACECA implemented a series of technical assistance: a) Customs Facilities at Central Asian Border Crossings; and b) harmonization of border crossing procedures.
- **USAID** has been providing technical assistance support in a variety of field related to trade and transport facilitation over the years. Its on-going Regional Economic Cooperation Project aims to support Central Asian and Afghan firms' trade by facilitating partnerships, training, and promoting an improved environment for trade.

Annex 9: Map

CENTRAL ASIA:
Central Asia Road Links – Republic of Tajikistan (CARs-2)