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Report No: PAD1473

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED IDA GRANT

IN THE AMOUNT OF SDR 178.1 MILLION
(US$ 250 MILLION EQUIVALENT)

TO THE

ISLAMIC REPUBLIC OF AFGHANISTAN

FOR THE

TRANS-HINDUKUSH ROAD CONNECTIVITY PROJECT

September 23, 2015

Transport & ICT
Afghanistan Country Management Unit
South Asia Region

CURRENCY EQUIVALENTS

Exchange Rate Effective August 31, 2015

Currency Unit	=	Afghan Afghani (AFG)
AFG 59.05	=	US$1
US$ 1.4038	=	SDR 1

FISCAL YEAR

December 21 – December 20

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank	IFR	Interim Financial Reports
ANSF	Afghan National Security Forces	IRR	Internal Rate of Return
ARAP	Afghanistan Rural Access Project	ISAF	International Security Assistance Force
ARTF	Afghanistan Reconstruction Trust Fund	ISN	Interim Strategy Note
B2B	Baghlan to Bamiyan	ISR	Implementation Status Reports
DFID	United Kingdom (U.K.) Department for International Development	LBI/B&V	Louis Berger Intl. / Black and Veach Consultants Consortium
DPW	Directorate of Public Works	MOF	Ministry of Finance
EC	European Community	MPW	Ministry of Public Works
ESIA	Environmental and Social Impact Assessment	NPV	Net Present Value
EU	European Union	NERAP	National Emergency Rural Access Project
GDP	Gross Domestic Product	NRAP	National Rural Access Program
GIZ	German Agency for Technical Cooperation	O&M	Operations and Maintenance
GIRoA	Government of the Islamic Republic of Afghanistan	PCMC	Procurement and Contract Management Team
GRM	Grievance Redress Mechanism	PDO	Project Development Objective
GRS	Grievance Redress Service	PMT	Project Management Team
HDM4	Highway Development and Management Model version 4	PPIAF	Public-Private Infrastructure Advisory Facility
HQ	Head Quarters	PPPs	Public-Private Partnerships
ICR	Implementation Completion Report	RAP	Resettlement Action Plan
ICT	Information and Communication Technologies	SMA	Stone Mastic Asphalt
IDA	International Development Association of the World Bank	THiRC	Trans-Hindukush Road Connectivity
IEG	Internal Evaluation Group	UNDP	United Nations Development Programme
IFC	International Finance Corporation	UNOPS	The United Nations Office for Project Services
IFI	International Financial Institution	USAID	United States Agency for International Development

Regional Vice President:	Annette Dixon
Country Director:	Robert J. Saum
Senior Global Practice Director:	Pierre Guislain
Practice Manager:	Karla Gonzalez Carvajal
Task Team Leaders:	Andreas Schliessler / Luquan Tian

AFGHANISTAN
Trans-Hindukush Road Connectivity Project

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PAD DATA SHEET

Afghanistan

Trans-Hindukush Road Connectivity Project (P145347)

PROJECT APPRAISAL DOCUMENT

SOUTH ASIA
GTIDR

Report No.: PAD1473

Basic Information		
Project ID P145347	EA Category A - Full Assessment	Team Leader(s) Andreas Schliessler/ Luquan Tian
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ] Financial Intermediaries [ ] Series of Projects [ ]	
Project Implementation Start Date 20-Oct-2015	Project Implementation End Date 30-Jun-2022	
Expected Effectiveness Date 30-Jan-2016	Expected Closing Date 31-Dec-2022	
Joint IFC No		

Practice Manager/Manager	Senior Global Practice Director	Country Director	Regional Vice President
Karla Gonzalez Carvajal	Pierre Guislain	Robert J. Saum	Annette Dixon

Borrower: Islamic Republic of Afghanistan			
Responsible Agency: Ministry of Public Works			
Contact:	Mohammad Yamma Shams	Title:	Chief Executive Director Afghanistan Railways Authority
Telephone No.:	(93-700) 290-322	Email:	yamma212002@yahoo.com

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

Total Project Cost:	255.00	Total Bank Financing:	250.00
Financing Gap:	0.00		

Financing Source	Amount
BORROWER/RECIPIENT	5.00
IDA Grant	250.00
Total	255.00

Expected Disbursements (in US$ Million)

Fiscal Year	2016	2017	2018	2019	2020	2021	2022	2023	0000	0000
Annual	10.00	30.00	45.00	60.00	45.00	30.00	25.00	5.00	0.00	0.00
Cumulative	10.00	40.00	85.00	145.00	190.00	220.00	245.00	250.00	0.00	0.00

Institutional Data

Practice Area (Lead)

Transport & ICT

Contributing Practice Areas

N/A

Cross Cutting Topics

[ ] Climate Change
[X] Fragile, Conflict & Violence
[ ] Gender
[ ] Jobs
[X] 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	85		
Information and communications	Telecommunications	10		
Public Administration, Law, and Justice	Public administration-Transportation	5		
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	Regional integration	80
Rural development	Rural services and infrastructure	20
Total		100

Proposed Development Objective(s)

The project development objective is to improve road transport connectivity across the Hindukush mountain range.

Components

Component Name	Cost (US$ Millions)
Road construction and rehabilitation	240.00
Institutional support and project management	10.00

Systematic Operations Risk- Rating Tool (SORT)

Risk Category	Rating
1. Political and Governance	High
2. Macroeconomic	Low
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	Substantial
7. Environment and Social	High
8. Stakeholders	Moderate
9. Other	High
OVERALL	High

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**

Legal Covenants

Name	Recurrent	Due Date	Frequency
Existing IP Consultant contract	**X**		CONTINUOUS

Description of Covenant

The Recipient, through MPW, shall maintain until August 31, 2016 or such other date as may be agreed between the Recipient and the Association, the services of the Implementation Consultant under the existing contract to assist MPW in the day-to-day implementation, coordination and monitoring of the Project.

Name	Recurrent	Due Date	Frequency
New IP Consultant contract		31-Aug-2016	

Description of Covenant

By no later than August 31, 2016, the Recipient, through MPW, shall contract for a period agreed between the Recipient and the Association the services of a duly qualified and experienced Implementation Consultant team, with qualifications and under terms of reference satisfactory to the Association.

Name	Recurrent	Due Date	Frequency
Recurrent MPW PMT capacity assessment	**X**		Semi-annual

Description of Covenant

The recipient shall, every six months during the entire period of the Implementation Consultant's contract, carry out together with the Association, an in depth review of the implementation capacity of MPW and the PMT in order to determine their readiness to assume full implementation responsibility without IC support and make decisions on the necessary follow-on implementation arrangements.

Conditions

Source Of Fund	Name	Type
IDA Grant	Govt. funding of RAP for B2B segment 1	Disbursement

Description of Condition

No withdrawal shall be made under Category (2) until and unless the Association has received satisfactory evidence that enough budget to adequately cover full compensations due to Displaced Persons under the RAP for the first segment of the B2B road, dated May 20, 2015 has been made readily available by the Recipient in a manner satisfactory to the Association.

Team Composition				
Bank Staff				
Name	**Role**	**Title**	**Specialization**	**Unit**
Andreas Schliessler	Team Leader (ADM Responsible)	Lead Transport Specialist		GTIDR
Luquan Tian	Team Leader	Sr. Transport. Spec.	Highway Engineer	GTIDR
Anand Kumar Srivastava	Procurement	Sr. Procurement Specialist	Infrastructure Projects	GGODR
Asha Narayan	Financial Management	Sr. FM Specialist		GGODR
Abdul Hameed Khalili	Team Member	Operations Officer		GTIDR
Abdullah Noorzad	Team Member	Team Assistant		SACKB
Andrew R. Jones	Team Member	Operations Analyst		GCPPP
Asif Ali	Team Member	Sr. Procurement Specialist		GGODR
Asta Olesen	Safeguards Specialist	Senior Social Development Specialist		GSURR
Binyam Reja	Peer Reviewer	Lead Transport Specialist		GTIDR
Chau-Ching Sheng	Finance Officer	Sr. Finance Officer		WFALN
Christopher R. Bennett	Peer Reviewer	Lead Transport Specialist	Highway Engineer	GTIDR
Claudia Nassif	Team Member	Lead Country Economist	Broader Project Impacts	GMFDR
Comfort Onyeje Olatunji	Team Member	Program Assistant		GTIDR
Ibrahim Khalil Dajani	Peer Reviewer	Sr. Operations Officer		GTIDR
James Orehmie Monday	Safeguards Specialist	Senior Environmental Engineer	Environmental Safeguards	GENDR
Juan Carlos Alvarez	Counsel	Senior Counsel		LEGES
Mohammad Omar Joya	Team Member	Economist	Broader Economic/ Social Project Impacts	GMFDR
Mohammad Yasin Noori	Safeguards Specialist	Social Development Specialist	Social Safeguards	GSURR
Mohammed Ajmal Askerzoy	Team Member	Operations Officer	Road Engineer	GTIDR
Obaidullah Hidayat	Safeguards Specialist	Environmental Specialist	Environmental Assessment	GENDR

Said Dahdah	Peer Reviewer	Sr. Transport. Spec.		GTIDR

Extended Team

Name	Title	Office Phone	Location
Terje Wolden	Consultant - Former TTL for earlier Salang pass rehabilitation		

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments

Consultants (Will be disclosed in the Monthly Operational Summary)

Consultants Required?	Consultants will be required

I. STRATEGIC CONTEXT

A. Country Context

1. Afghanistan is one of the least developed countries in the world. Impoverished and fragile after several decades of war and conflict within its borders, it continues to face uncertainty and challenges on both security improvements and economic development. Its Gross Domestic Product (GDP) per capita in 2014 was US$ 693. On the UNDP Human Development Index, Afghanistan ranked 169th out of 187 countries in 2013. However, the report also showed that average life expectancy is up from 41.2 years in 1980 to 60.7 in 2013, with women's life expectancy mirroring the overall trend. Afghanistan's gender inequality ranking is 149 out of 187 countries. Across all economic indicators, Afghanistan is characterized by high levels of poverty and inequality.

2. In late 2014 the Government of the Islamic Republic of Afghanistan (GIRoA) has embarked on a political transition process under a unity government. On the security side, the Afghan National Security Forces (ANSF) have assumed full responsibility for security since the end of 2014.

3. The political and security transition continues to take a heavy toll on Afghanistan's economy. Economic growth in Afghanistan slowed sharply starting in 2013. The decline in growth, from an average of 9 percent during 2003-2012 to 3.7 percent in 2013 and 2 percent in 2014, is mostly the result of a protracted political transition in 2014 and the slow pace of reforms, reducing investor and consumer confidence in the economy. The growth outlook for 2015 remains weak: unfavorable weather conditions for agriculture production and lagged effects from 2014 could continue to undermine economic recovery.

4. Moreover, the Government is still grappling with containing a fiscal crisis which unfolded in 2014. The economic slowdown, compounded by increased governance vulnerabilities and weaknesses in tax and customs enforcement, resulted in a hefty decline of domestic revenues from a peak of 11.6 percent of GDP in 2011 to 8.4 percent in 2014. In spite of measures to restrain expenditures, the government faced a financing shortfall in excess of $500 million in 2014, which it managed with the help of exceptional donor assistance and by drawing down cash reserves and accumulating arrears. Consequently the government started the year 2015 with a relatively weak fiscal position, further strained by stagnating revenues in the first quarter. Restoring fiscal stability is critical to steer Afghanistan's economy back on a path of recovery and growth. This will require accelerating revenue enhancing reforms, stronger expenditure consolidation efforts and additional financial assistance.

5. Afghanistan's national development prospects hinge on the ability of the Government to maintain security, legitimacy, improve living conditions and promote socio-economic development. Formidable challenges remain in poverty reduction, job creation, and service delivery in Afghanistan during this delicate period in its transition process. The GIRoA still remains highly aid dependent and is under high pressure to bring about tangible improvements in the lives of the population. Looking beyond 2015, Afghanistan's poverty reduction and development challenges will require progress in four key areas: (i) ensuring fiscal sustainability

by mobilizing internal revenue and securing grant assistance, and by safeguarding non-security expenditures; (ii) supporting inclusive and job-creating private-sector led growth by unlocking the potential of the agriculture, services, and natural resources sectors; (iii) improving the still very low levels of human capital and skills; and (iv) continuing to strengthen institutions and governance.

6. A key condition for development is also the ability of the Afghan Government to attract and hire qualified staff into its civil service structure, and to retain well-performing civil servants by providing financial and other incentives. The World Bank funded *Capacity Building for Results (CBR) Facility* assists the Government in improving the capacity and performance of select line ministries, including the Ministry of Public Works, for carrying out their mandates and delivering services to the Afghan people. This is being achieved through the implementation of specific capacity and institution building programs and a program for topping off of salaries for well-qualified and well-performing civil servant staff. The proposed Trans-Hindukush Road Connectivity Project is among those projects that are expected to benefit directly from the CBR Facility.

B. Sectoral and Institutional Context

7. Good transport infrastructure is a prerequisite for a stable and more prosperous Afghanistan. Improving Afghanistan's infrastructure is essential for accelerating economic growth and poverty alleviation. Despite very significant investment during the past decade, the country requires much additional investment in transport infrastructure not only to ensure basic service delivery and enhance the quality of life of its growing population, but also to avoid a possible binding constraint on market access, regional trade and economic growth. The post-transition growth outlook is contingent upon a relatively stable security environment, with agriculture and extractive industries likely to be among the key sectors driving growth. Agriculture is the backbone of the nation's economy, providing more than 75 percent of employment and contributing 25 percent to the GDP. On the other hand, the extractive industries sector currently accounts for only 4 percent, a very small share of GDP, but has significant potential in light of Afghanistan's deposits of copper, iron ore, and hydrocarbons. Unlocking the potential of both agriculture and extractive industries sectors will require significant improvement in the transport infrastructure, in particular in the road network.

8. Afghanistan suffers from significant transport infrastructure gaps in terms of connectivity and accessibility. These gaps result in relative isolation of parts of the country and negatively affect regional and internal integration and trade. Annex 4 provides information about the poverty linkage of the proposed Trans-Hindukush Road Connectivity project and how it could help reduce the relative isolation of some of Afghanistan's poorest areas. In a broader sense, the country is located at the intersection of Central Asia and South Asia and the existing highways provide international links to Iran, Pakistan, Tajikistan, Turkmenistan and Uzbekistan. More than 90 percent of freight and almost 85 percent of intercity passenger transport are carried by road transport. The total length of Afghanistan's road network is about 123,000 km but nearly 80 percent of the roads are not "all-season" roads. About 63 percent of the population is more than two kilometers away from an all-season road.

9. The functioning of Afghanistan's economy and the country's national integration depend to a large degree on reliable road connections across the Hindukush mountain range. With summit heights between 4000 and 7800 meters, and with an east-west extension of about 800 km, it stretches from the northeast of Afghanistan to the center of the country and thereby establishes a physical barrier between the two key economic regions which are also the most highly populated areas: (i) the Jalalabad - Kabul region to the south of the mountains and (ii) the Baghlan – Mazar-e-Sharif - Kunduz region to the north. Connectivity between these regions across the Hindukush mountain range is therefore essential for the functioning of the national economy, for poverty reduction through the internal and regional integration of the country, and for the development of the planned resource corridor (see also Annex 4). However, only two road crossings over the Hindukush mountain range have so far been constructed:

- The main crossing is the Salang Highway (87 km) built in the 1960's by the former Soviet Union. It carries most of the cross-Hindukush traffic, which was typically between 4,500 and 9.000[1] vehicles a day during the past years, with a high share of trucks. About 80% of goods and most fuel coming into the greater Kabul area are carried from the North across the mountains on the Salang highway. It is a winding 7 meter wide road with only one lane in each direction. Its highest point is at 3,400 meters altitude where a tunnel (2.8 km long) crosses under the snow-capped mountain peaks. When it was built, Salang tunnel was the world's highest road tunnel. The road also includes 21 snow avalanche galleries (artificial tunnel-like structures) for avalanche and rock fall protection, totaling about 12 km in length. However, heavy snowfall, avalanches, landslides and accidents still often interrupt traffic on the road, sometimes for several days or even weeks. The effects of road closures are immediately felt in Kabul, where prices for some commodities such as fuel may rise by 30 percent after two or three days of road closure.
- A secondary crossing is the unpaved Baghlan to Bamiyan road (B2B road, 152 km) which is used much less and mostly by smaller vehicles, with traffic volumes around 800 vehicles per day. It was built essentially as a local road providing access to a series of villages and mining areas. It provides a much longer cross-Hindukush connection than the Salang highway but the road is less steep and its highest altitude is only about 2,500 meters, which makes it less vulnerable to interruptions by snowfall. However, due to the absence of a paved surface and of appropriate drainage structures, the road is often not useable during periods of rain, which can last several weeks.

10. *Previous attempts for securing trans-Hindukush road connections.* The Salang road with its tunnel and snow galleries was originally designed and built in the early 1960's and opened in 1964, for an expected traffic of about 1,000 vehicles a day, and for vehicles not as heavy as today's trucks. It was funded and executed by the former Soviet Union and the quality of the original construction was very good, with asphalt concrete pavement in the lower sections of the road and a very solid concrete pavement in the higher road sections above 2,500 meters altitude. The road and the tunnel held up well during many years. However, the tunnel was seriously damaged in 1982 by the detonation of a truck loaded with explosives. Also, ever-increasing traffic volumes, heavier vehicles using snow chains in winter, many heavy military trucks with steel-spike studded tires that quickly wear down pavements, and the lack of proper maintenance eventually led to a

[1] The highest traffic volumes of up to 9,000 vehicles per day were during the departure of ISAF military forces from Afghanistan.

serious deterioration of the road, especially in the higher sections that are exposed to extreme climate, and of the tunnel and the snow galleries. Several expensive repairs during the past 25 years have all been short-lived, due to (i) the continued use of the road by overloaded trucks using snow chains in winter, (ii) the reluctance to fully rebuild the reinforced concrete pavement which would have required partial and sometimes full closure of the road during several weeks and (iii) the reluctance to carry out a full rehabilitation of the tunnel and its drainage system, which would also require full closure during long periods of up to a year. Construction-related closures of the road would mostly be needed during the summer season, since road construction in the high altitudes cannot be carried out in winter. It was generally found impractical to close the road and tunnel for longer periods and a more definitive solution of the problem was postponed again and again, favoring instead "quick fixes" which never lasted more than a few years. The problem of truck overloading and excessive use of snow chains remains unresolved until today.

11. *Salang pass capacity expansion.* During the past years the GIRoA has explored with several IFI's (especially ADB) the much needed project to expand the capacity of the Trans-Hindukush road crossing, since the Salang pass is today operating beyond its nominal capacity on most days. There are several project options, some of which include the idea of building a second tunnel parallel to the existing tunnel. A second tunnel would allow closing the existing tunnel during a year or so and fully rehabilitate it, once the new parallel tunnel would be completed. The expectation by the GIRoA that the new second tunnel would materialize soon led to the further postponement of much needed repairs and rehabilitation of the old existing tunnel and the road. However, it has now become clear that the GIRoA will probably need several more years to secure the funding for a second tunnel. This has now made the full rehabilitation of the existing Salang tunnel and road more urgent and critical than ever before, due to the advanced deterioration process within the tunnel and snow galleries, and on the road itself which has essentially lost its pavement on about 30 km of the high-altitude sections.

12. *Complexity of solving the Hindukush road crossing problem.* The GIRoA has requested the Bank to develop, fund and help manage an integral project which would ensure a reliable trans-Hindukush connectivity until a much larger project of a major capacity expansion of the Salang pass (including a second tunnel to complement the existing one) can be implemented in the medium term. The project is expected to have the following key characteristics:

a) Developing and upgrading the Baghlan to Bamiyan road to become a safe and dependable Hindukush crossing which can be used as an alternative when the Salang Pass is closed due to weather-related events, construction work or other reasons.

b) Designing and carrying out repairs, rehabilitation and maintenance on the Salang highway. This would involve as main elements (i) various types of repairs to the tunnel and galleries which will require temporary partial and/or full closures, (ii) the construction of a new heavy-duty concrete pavement for about 27 km length, located between 2,500 and 3,400 meters altitude above sea level, and (iii) rehabilitation of the existing pavement on the lower sections of the highway.

c) Phased and linked implementation schedules between the two sub-projects described above, to ensure that there is a reliable cross-Hindukush road connection at all times during the implementation of the overall project.

d) Phased construction processes on the Salang road, tunnel and galleries which will minimize

closures of the Salang pass as much as possible.

e) The Baghlan to Bamiyan road will include fiber optic cables laid in ducts embedded in the road structure. The new fiber optic cable along this road will become part of the "data highway" for Afghanistan and provide a backup loop for the existing trans-Hindukush fiber optic cable along the Salang Pass road. It will facilitate the planned opening of the Afghan ICT market to private sector ICT service providers.

f) Packaging of civil works taking into account the local political and security situation, and involving local groups and contractors as much as possible, especially for the Baghlan to Bamiyan sub-project which traverses Taliban-dominated areas.

g) Establishing a realistic overall time frame for the project which takes into account the risks and the technical complexity of the project. A total project implementation period of seven years is envisaged.

13. *Increasing the role of Afghan government institutions in implementing externally funded projects*. During the past years the World Bank and the Government of Afghanistan have worked together to increase the role of Government institutions in the implementation of externally funded investment projects. Significant progress has been made in the transport sector, where the World Bank has helped the Ministry of Public Works (MPW) to take over some project implementation responsibilities from external agencies in two ongoing rural road projects, namely (i) the National Emergency Rural Access Project (NERAP) and (ii) the Afghanistan Rural Access Project (ARAP). In the early phases of implementing those projects MPW relied entirely on the United Nations Office for Project Services (UNOPS) to implement the projects. In 2012, however, MPW (with the support from the Bank and after training received from UNOPS) started taking over more roles and activities. The day-to-day supervision functions of UNOPS were reduced and domestic consultants hired by MPW have since been capable to deal with most of the technical and safeguards issues, procurement and a part of financial management responsibilities. This reform has very much increased MPW participation and ownership in project implementation. More recently, the new Government is putting an even higher emphasis on further increasing the role of domestic institutions and local consultants in project implementation which should soon lead to a full takeover. MPW is keen to use domestic capacity to deliver more technical complex and larger size projects, such as the proposed Trans-Hindukush Road Connectivity Project. It needs to be recognized, however, that important inefficiencies and bottlenecks still exist inside the Government's fiduciary management system[2] which cause major payment delays. Therefore, MPW so far still has ongoing contracts with UNOPS to provide fiduciary management services, using a parallel system including a *float account*[3] for disbursements. The government is keen to remedy the weaknesses in its own fiduciary management system and to not sign any new contracts with UNOPS.

14. *Deficiency of Road Operation and Maintenance (O&M).* In Afghanistan, there is a general lack of a maintenance culture which has resulted in premature deterioration of road and other infrastructure. Efficient management and maintenance is mostly absent on a large part of the road

[2] World Bank report "Critical administrative constraints to service delivery - Improving public services in Afghanistan's transformational decade, November 2014.

[3] The *float account* is a UNOPS-managed disbursement account which will however not be used under the proposed project (see Annex 3 on Implementation Arrangements).

network, especially on secondary and local roads. Maintenance planning for the network of strategic main highways is done by the Ministry of Public Works (MPW) and is then executed through MPW's provincial departments (Directorate of Public Works - DPW). In order to address this well-known and longstanding issue, many external funding agencies (World Bank, ADB, USAID, DFID, and GIZ) are already providing large-scale technical and financial support to MPW and others for building road asset management capacity. The largest initiatives in this area are the following:

- USAID has recently approved nearly US$ 100 million to support MPW in institutional reform towards establishing a Road Authority, a Road Fund and a Transport institute. A portion of this fund will also be allocated to performance based maintenance contracts for trunk highways through AITF-Afghanistan Infrastructure Trust Fund.
- ADB is funding a program piloting performance-based road maintenance executed by private firms on the Kabul-Jalalabad highway and has also provided funding to update the road sector master plan for Afghanistan.
- The World Bank has been supporting MPW on rural roads development and maintenance for the last decade and has recently helped to implement community-based routine maintenance on more than 1,000 km of secondary roads through the ongoing ARAP – Afghanistan Rural Access Program. The Bank also provides support through the O&M Incentive Program funded under the Afghanistan Reconstruction Trust Fund (ARTF) which is managed by the Bank's governance team. As described elsewhere, the Bank also supports the MPW through the ongoing *Capacity Building for Results (CBR) project* to improve the civil servant system capacity and by providing resources for the MPW so that it can hire well-qualified local staff into its regular civil servant structure.

The proposed new THiRC project will include additional capacity building in the area of road management and maintenance, but focused specifically on defining and implementing appropriate mechanisms for the management and maintenance of the two project roads, in order to avoid any further duplication of the already massive support provided in this area by Afghanistan's external partners, including the World Bank.

15. Beyond the narrow issue of road management and maintenance, the Government's broader ability to construct and operate the transport network and regulate transport services is impaired by limited capacity, weak governance, and outdated policies. The Government, with support from several external partners, is now planning sector reform actions (i) to consolidate the fragmented transport sector institutions into a new Ministry of Transport, (ii) to establish a Road Authority and a Road Maintenance Fund; (iii) to establish and strengthen commercially oriented, autonomous transport sector entities that currently reside in project implementation units of various different ministries that have mandates related to transport; and (iv) to establish a coherent policy which emphasizes good management of existing road infrastructure assets and (v) improve the regulatory environment for road transport services. The Bank's Governance team has reviewed MPW's existing strategy for road operation and maintenance and has put in place an incentive-based financial support program funded from ARTF's recurrent account, with the objective to support O&M. Community-based road maintenance and private sector involvement in O&M have been investigated and are being applied under the Bank-financed Afghanistan Rural Access Project (ARAP) and by other donors like USAID, but such O&M modalities are yet to be streamlined into the government system.

16. Road Safety is a major issue in Afghanistan which kills and injures thousands of citizens every year. A major root cause is deficient driver and pedestrian behavior, but road design deficiencies are also a major contributing factor, along with unsafe vehicle condition, lack of law enforcement, etc.

C. Higher Level Objectives to which the Project Contributes

17. The proposed project is in supports of the World Bank's twin goals of ending extreme poverty and promoting shared prosperity. It is fully aligned with the Afghanistan Interim Strategy Note (ISN) for FY 2012 to FY 2014[4] which is the currently valid document guiding World Bank involvement in Afghanistan. The ISN proposes three strategic objectives: (i) building legitimacy and capacity of institutions; (ii) equitable service delivery; and (iii) inclusive growth and jobs. The proposed project will directly and indirectly play a role in the achievement of several outcomes under each of the strategic objectives. The project aims to improve connectivity across the Hindukush mountain range between Bamiyan and Kabul, through Afghanistan's mineral belt and a part of its agricultural heartland. This will spur economic development, support one of the planned "Resource Corridors", foster domestic and regional trade by strengthening the transport network and promote social integration by reducing time and cost of travelling, particularly for the poorer citizens of the central, northern and southern provinces. The project also directly eliminates the existing transport bottleneck for the development of some agricultural and mining areas which is likely to create jobs for many Afghans. Improvement in road conditions will also improve the quality of public inter-urban transport ridership, which in turn will help women and vulnerable groups which depend mostly on public transport means. Finally, the execution by the GIRoA of such a highly visible and broadly supported project providing an essential national service, will strengthen the Government's legitimacy in the eyes of the population. It will also support job creation, mainly during the construction phase.

18. *Rationale for World Bank involvement*. The World Bank has the ability to provide both sizable investment funding over lengthy periods of time and technical support on sector reform which is based on broad international experience and best practice. This gives the Bank a comparative advantage in facilitating and supporting reform processes and thereby enhancing the prospects for the effectiveness of public expenditures and services. Afghanistan needs to upgrade its transport infrastructure. Since 2001, the Government and international partners, including the Bank, have been working on rehabilitation and reconstruction of transport infrastructure. The World Bank provided about US$ 165 million for an Emergency Transport Rehabilitation project which included an earlier rehabilitation of the Salang Pass; and also provided US$ 585 million under NERAP and ARAP, which rehabilitated about 4,000 km of rural roads. Under the proposed THiRC project, World Bank support will focus on two critical main highway links to improve and sustain road transport services. By providing two concurrent projects to the transport infrastructure sector (ARAP and THiRC) the Bank will deepen the program of support for transport infrastructure improvements. This approach adds value to the client in four ways: (a) strengthening key institutions through policy advice and technical assistance to complement physical investments for better outcomes; (b) providing an array of solutions that extend beyond road

[4] Report No: 66862-AF of March 9, 2012

building to enhance the capacity of service delivery; (c) using the project roads as a pilot to set up a sustainable O&M model that can be applied elsewhere on the highway network; and (d) using the Bank's convening power to bring together different government agencies (like Land Authority and MoF) as well as different donors to improve cross sector coordination and putting in place a mechanism for transport infrastructure construction and maintenance.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

19. The project development objective is *to improve road transport connectivity across the Hindukush mountain range.* The means to achieve this objective are (i) to rehabilitate the Salang Pass and to develop the Baghlan to Bamiyan (B2B) road to become a viable alternative to the Salang Pass, and (ii) to establish suitable arrangements for the management, maintenance and operation of those two roads. There are no other viable passes for normal traffic across the Hindukush mountain range. As explained elsewhere in this document, the PDO can only be achieved through an integral project which combines the above mentioned elements.

B. Project Beneficiaries

20. Both institutional and public stakeholders will benefit from the project. Public stakeholders that would benefit from the project include road users and villagers along the corridors to be improved under the project. Road users, local *Shura* councils and people along the roads covered by the project (including insurgent groups) have shown their strong support for the project because they believe that it will support economic and social development, and despite their awareness that there may be need to acquire some of their land and properties. Institutional stakeholders include the provincial governments, Ministry of Mines and Ministry of Agriculture who all need the improved roads to promote development in the geographical area of influence of the project.

21. Both women and men are expected to benefit from the improved mobility, safety and access to markets and services, especially along the B2B road. During consultations on social safeguards, special efforts have been made to ensure the participation of women and this is documented in the ESIA and the RAP for this project. There is no hard gender-specific data available on road users, pedestrian traffic and on traffic injuries and deaths along the planned highway (and in Afghanistan in general). However, in terms of safety benefits it seems likely that women and children will benefit in particular from the increased pedestrian safety generated by the project, since they tend to constitute the majority of pedestrians in settlements along the road, in order to access social services and markets (stores). The project will improve pedestrian safety especially on the B2B road which crosses many settlements. On the other hand, men will mostly benefit from those road safety improvements that address safety risks for drivers and vehicle occupants, which in their majority are men. Men are likely to benefit from temporary jobs during construction, since social norms in Afghanistan do not normally allow women to work on road construction sites.

22. Given that the project covers major roads, it was found that it does not lend itself for major gender-specific project actions or components, unlike urban and rural road projects which do often present such opportunities. (See section VI.E for more details.)

23. The project will also benefit People with Limited Mobility since the planned service areas along the B2B road will be designed barrier-free to enable access with wheelchairs, crutches, etc.

C. PDO Level Results Indicators

24. The achievement of the PDO will be measured by the following key *outcome* indicators:

a) Reduction in average travel time for trucks on the Baghlan to Bamiyan road (hours);
b) Average number of days when road crossing of Hindukush mountain range is not possible (days);
c) Direct project beneficiaries (number), of which female (percentage).

25. Key *output* indicators for the project will be:

a) Earthworks completion rate on B2B road (%)
b) Pavement completion rate on B2B road (%)
c) Length of roads constructed, non-rural (km);
d) Length of roads rehabilitated, non-rural (km);
e) Salang tunnel repair works completed, including tunnel safety aspects (yes/no);
f) Mechanism for Management, Maintenance and Operation of both the B2B road and the Salang Pass established and functioning (yes/no)
g) Fiber optic cables and ducts installed on B2B road (km);
h) Grievance Redress System operational with registry of complaints and recording of reply times (yes/no);
i) Road Safety Audit of Engineering Design done and recommendations implemented during civil works (yes/no);
j) Consultations with civil society and project-affected persons, with at least 30% of consultations focused on women (number)
k) Capacity Building - Compliance with Performance Indicators for MPW project implementation capacity (number)

III. PROJECT DESCRIPTION

A. Project Components

26. The proposed project would achieve the Project Development Objective through the implementation of the two project components summarized below. A more detailed project description is in Annex 2. The total project cost is estimated at US$255 million, with US$250 million to be funded by IDA and US$ 5 million by the GIRoA for land acquisition and resettlement.

27. **Component 1: Road construction and rehabilitation (US$240 million).** Component 1 will include (i) civil works for the construction of the Baghlan to Bamiyan (B2B) road and the rehabilitation of the Salang road and tunnel, (ii) consulting services, including for the supervision of civil works and for regular technical audits by an independent international auditor to verify

that road works have been executed in compliance with the technical specifications, and (iii) goods, which will include a small number of equipment items which MPW may need to keep the two roads open during the project period. The finalized technical design of the B2B road will include cable ducts and fiber optic cables. Technical specifications for the civil works will include labor-intensive choices wherever feasible, such as masonry parapets instead of steel guardrails, and masonry retaining walls. It is estimated that within the total cost of Component, about US$ 170 million will be spent on the Baghlan to Bamiyan road, US$ 55 million will be spent on the Salang road and tunnel, while the remainder of US$ 15 million will be spent on goods and services benefitting both roads.

28. During the first half of the project implementation period, the main focus will be on (i) upgrading the B2B road so that it can serve as a bypass road of the Salang pass, and (ii) carrying out those works on the Salang pass that do not require closures of the road and tunnel. Then, once the B2B road has been upgraded and is open, it will be possible to carry out those major repairs of the Salang road and tunnel which require closures during longer periods.

29. **Component 2: Institutional support and project management (US$ 10 million).** This component will be comprised of several subcomponents:

a) *Road Safety.* This will include a review/audit of the existing design for the two roads with the specific purpose of detecting and remedying any potential design deficiencies in terms of road safety.

b) *Definition and implementation of asset management arrangements for the trans-Hindukush roads*. This subcomponent will first include a study to define the most appropriate arrangements for the effective and efficient management, operation and maintenance of the newly upgraded roads, after their completion. This study will be carried out during the first 18 months of the project. This will be followed by the actual implementation of the arrangements during the second and third year of the project.

c) *Community engagement.* This will include the design and execution of MPW's information and communications campaign for the purpose of building public and stakeholder support for upgrading of the two roads. This will of particular importance for this project, since important project activities are physically located in Taliban-controlled areas. The communications and outreach campaign is expected to include an ICT-based citizen feedback mechanisms and a Grievance Redress Mechanism (GRM), and will also promote road safety awareness among road users.

d) *Training, capacity building and institutional development.* The project will help build the capacity of MPW's staff of civil servants for managing externally funded projects in line with the requirements of the World Bank and other donor agencies. These requirement refer mostly to procurement, financial management, disbursement and safeguards management, but also to contract management, technical management, and more generally to the application of good governance and good practices. MPW will use the services of an international Implementation Consultant firm and local consultants for project implementation support and institutional development, and to train MPW's civil servants in all those areas listed above.

e) *Project management support*, including the cost of the Project Management Team (PMT)

operation.

B. Project Financing

Financing Instrument

30. The World Bank is expected to contribute the amount of US$ 250 million to the project through an IDA Grant. The Recipient of the Grant will be the Islamic Republic of Afghanistan and the representative of the Recipient will be the Ministry of Finance.

31. Public sector financing is the appropriate vehicle for financing the upgrading of the project roads because of the large initial cost that cannot realistically be recovered through road user tariffs, especially under the prevailing conditions in Afghanistan. Public investment in road infrastructure is a key tool for the Government of the Islamic Republic of Afghanistan towards promoting the country's development, including for the development of the private sector. Road network development in Afghanistan at present can only be accomplished through government actions, since private investors are unwilling to make large investments in road projects in Afghanistan at this time. Also, (i) Afghanistan does not have legislation in place to enable Public-Private Partnerships (PPPs); (ii) the traffic level on the Baghlan to Bamiyan road would be too low to make this road financially viable without a huge injection of capital by the public sector in the form of a grant; and (iii) the security and macroeconomic risks would be rated too high by any serious private investor. However, tolling of roads has been practiced in Afghanistan for many years and a more limited PPP scheme for only the management and maintenance through private firms seems possible despite the absence of a broader enabling PPP legislation. The Bank team will work with IFC and PPIAF to develop and implement such a mechanism to bring in the private sector as much as realistic and feasible under the circumstances in Afghanistan.

C. Project Cost and Financing

32. The total cost of the project is expected to be US$ 255 million. This figure includes the estimated cost of all those social and environmental mitigation measures which are not already covered under project components 1 and 2. Most of the mitigation costs are to pay for land acquisition and resettlement along the B2B road. The World Bank would provide US$ 250 million through an IDA Grant[5]. The GIRoA is committed to cover the cost of RAP implementation which is estimated to be around US$ 5 million. This Government counterpart funding of US$ 5 million has already been approved in the national budget and is readily available to pay for land acquisition and resettlement compensation.

Project Components	Project cost (incl. taxes)	Financing	Grant Financing percentage
1. Road Construction and Rehabilitation	US$ 240 million	IDA Grant: US$ 240 million	100
2. Institutional Support and Project Management	US$ 10 million	IDA Grant: US$ 10 million	100
Cost of Social and Environmental safeguard measures not covered under Components 1 and 2	US$ 5 million	GIRoA: US$ 5 million	0
Total Project Cost	US$ 255 million		

[5] A Project Preparation Advance (PPA, No. Q884-AF) of US$ 5 million equivalent was already provided in January 2014.

D. Lessons Learned and Reflected in the Project Design

33. Afghanistan's difficult security environment has been a serious challenge for years. The Bank and the Government have learned important lessons from other similar projects in Afghanistan for working in this type of environment. The most important lesson is that projects can only be implemented successfully if local communities in the project area are convinced that the project brings benefits to them, such as jobs (temporary and permanent), access to markets and services, and increased social and economic welfare. Consultations with local communities must be part of project preparation. The engineering design and the packaging of civil works contracts should favor labor-intensive work methods for which local labor and Afghan contractors can be used. Community-based contracting should be used wherever possible to create incentives for the people living around the project area. Second, effective security-related coordination between different government entities is key for addressing security issues and challenges in a timely manner. An effective tool has been to include the security-related government agencies in the high-level Project Steering Committees. It has been demonstrated that this at least partially mitigates security risks and improves the response mechanisms to security incidents if and when they occur.

34. The Bank's Internal Evaluation Group (IEG) has carried out a large number of ex-post project assessments and has been able to extract as one of the fundamental lessons that the likelihood of a project's failure to achieve its development objectives increases proportionally with its complexity. This is especially true in fragile and conflict-affected countries such as Afghanistan, where the capacity of State institutions is limited and governance constraints exist. The design of the proposed project reflects this lesson by keeping things simple: The project has only two components and only one implementing agency.

35. The World Development Report 2011[6]: Conflict, Security and Development, which cautions *not to let perfection be the enemy of progress—embrace pragmatic, best-fit_options to address immediate challenges,* has guided the design of the Afghanistan Trans-Hindukush Road Connectivity Project. In the absence of basic security it is generally impossible to achieve technical perfection and fully optimized operation. There is a need to be pragmatic, to address immediate challenges within political realities, with approaches that can improve over time. Given the fragile country circumstances and complex political economy context in Afghanistan, the Bank has chosen an incremental and practical approach for implementing the proposed project, while accounting for country realities and anchored in a coherent program of immediate, medium, and longer term support. For the project implementation arrangements, the initial focus is on starting the project with involvement of an Implementation Consultant to support MPW in procurement, contract management and disbursement, and also on training MPW civil servants staff to handle transactions themselves, thereby creating the ability of MPW to follow good international practice in terms of procurement, contract management, financial management and disbursement. The medium term actions under the project will also include building the appropriate institutional setup for service-oriented management of the two upgraded Trans-Hindukush road crossings.

[6] WDR 2011 Report #62255

36. In the period 2003 – 2005 the World Bank provided about US$ 67 million of funding for the repair and rehabilitation of the Salang road, tunnel and snow galleries, under the Emergency Transport Rehabilitation Project (P078284). The ICR for that project provided some valuable lessons, especially concerning the sustainability of such investments. These lessons are reflected and discussed in Section IV.C below.

37. *The importance of convening partnerships is critical to deliver infrastructure services in fragile environments.* As described earlier, the Bank is already collaborating with several other International Financing Institutions (IFIs) in creating sustainable practices for managing and maintaining existing road assets in Afghanistan. In addition, South-South learning is an important part of the project. The successful experience from Chile and Argentina in operating and managing a high-altitude Trans-Andean road and a 3.0 km long tunnel at 3,200 above sea level, under very similar climatic conditions as in Afghanistan, will be conveyed and used for the design of O&M arrangements of the Salang Pass. Exchanges between MPW and the Chilean and Argentinian Road Administrations are envisaged and will be useful to better understand options for managing operations and maintenance of the Salang road and tunnel.

38. *The Bank should ensure that its interventions are responsive to client demand and the client's receptivity to reform.* In fragile and conflict states, Government engagement and commitment are imperative to increase the likelihood of satisfactory project outcomes. In Afghanistan, in some sectors, client engagement, capacity and ability to carry out projects have been low. The following recommendations from the IEG report *Improving Institutional Capacity and Financial Viability to Sustain Transport - An Evaluation of World Bank Group Support since 2002*[7], have been taken into account in the Project design: "*For the subsectors and transport modes that rely on operations and maintenance funds from public sources or earmarked funds such as intercity highways and rural roads: engage with the client where high-level policy decisions related to maintenance funding can be taken*" and "*Where complex reforms are planned, encourage continuous and sequential engagement and support appropriate government-led reform programs in a realistic time frame, taking into account the capacity of the government to carry out the reforms*".

39. *Cost estimates should take into consideration additional cost of insurance for contractors and consultants, and the cost of private security.* There are weaknesses in the contracting and consulting industries in Afghanistan, associated with the fragile country environment, security and local capacity issues. These weaknesses represent a significant challenge to the quality of construction and the implementation prospects of this project. To attract qualified local and international contractors that are needed for the civil works, contract packaging planning was introduced, joint ventures between international and local contractors are allowed and cost estimates have taken into consideration additional insurance and cost of private security. The same applies for consulting firms that will be considered for the supervision of works. Due to the weak capacity of the local firms, attracting an international reputable technical auditor would be highly desirable to guarantee close monitoring of project implementation and to ensure reporting on deviations from Project design and contract terms.

[7] IEG Improving Institutional Capacity and Financial Viability to Sustain Transport - An Evaluation of World Bank Group Support since 2002, March 2013, Report Number 77092

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

40. The project implementation agency will be the Ministry of Public Works (MPW). MPW has already established a Project Management Team (PMT) which is an integral part of the MPW and not a separate organization. MPW has appointed a high-level official (civil servant reporting to the Minister of Public Works) to lead project implementation. He also leads the PMT and coordinates with stakeholders. Within the PMT there are specialized units for engineering, procurement and contract management, administration, financial management, safeguards management, etc.

41. The World Bank team has carried out the standard capacity assessments of the Project Implementing Agency. It was found that MPW, including the PMT, have very substantial capacity deficiencies in all key areas (technical, procurement, contract management, financial management, disbursement) which cannot be overcome before project startup. It was therefore agreed between MPW and the Bank that MPW is to hire *Implementation Consultant (IP)* services to support the PMT and help it overcome those weaknesses. At the beginning of the project preparation period in 2014 the MPW signed a 2-year contract with UNOPS to provide IP services which will continue until August 31, 2016. The IP role will then be taken over by an international consulting firm to be recruited under the project. In order to ensure capacity development at the MPW PMT, leading to a full takeover by MPW staff of all project implementation activities, a *Transition Plan* will be implemented which is described in Annex 3 (Implementation Arrangements). The PMT will initially rely on a combination of existing MPW staff, the Implementation Consultant team and some individual local contract staff to carry out its functions. This is in line with the established practice and positive experience under the ongoing IDA/ARTF-funded Rural Access Project (ARAP) which is also under MPW. Some of the PMT staff will be located in MPW's provincial Directorate of Public Works (DPW) in the provinces where the project roads are located.

42. Given the wider impact of this project on Afghanistan as a whole, an *Inter-Ministerial Steering Committee* has been set up for this project to ensure inter-sectorial coordination and to obtain specific support from other agencies in the areas of security, land acquisition, construction permits, etc. The Committee is to be chaired by a high-level representative from the Presidential Office and co-chaired by the Minister of Public Works. It includes high-level representatives from various ministries and agencies, including security-related agencies.

43. A more detailed description of the implementation arrangements is provided in Annex 3.

B. Results Monitoring and Evaluation

44. MPW will be responsible for the monitoring of results of the Project. Monitoring will be done on a continuous basis. To collect field data, MPW will mainly use its staff located in the provincial offices of the three provinces where the project roads are located. These staff are usually able to carry out adequate monitoring despite the difficult security situation. As is the usual practice under externally funded projects, regular monitoring reports will be prepared by staff of the PMT, both for the World Bank but also for other government agencies such as the Ministry of Finance.

During the regular implementation review visits, staff from the World Bank and MPW will continue working together for joint results monitoring. The cost of the PMT is fully covered by the IDA Grant.

C. Sustainability

45. For any road investment project, the availability of sufficient funding and of appropriate arrangements for the management and maintenance of the road assets are essential to ensure sustainability. This is even more critical for the specific roads covered under this project since they require higher-than-usual O&M efforts and special management arrangements due to (i) the location of the roads in the high mountains with harsh climatic conditions which require snow and ice removal during several months of the year; (ii) the presence of special risks related to the high-altitude Salang tunnel and of the snow galleries along the Salang pass, both of which are in an advanced state of deterioration; (iii) the yet unmet need to control the severe overloading of trucks and the use of snow chains which cause accelerated pavement deterioration; and (iv) the critical importance of the Trans-Hindukush roads for Afghanistan's internal and external trade.

46. During the past 15 years there have been several major repair and rehabilitation projects for the Salang road, tunnel and snow galleries. Under the World Bank funded *Emergency Transport Rehabilitation Project (P078284)* about US$ 67 million were spent on the Salang pass between 2003 and 2005. The ICR for the project (prepared in 2008) found that *"…the infrastructure rehabilitation part of the Project was completed successfully but there was a lack of progress in areas relevant to the Project's long-term sustainability. Maintenance of the country's road network so far has been minimal. Continued financing is essential for the sustainability of the roads component. An example of the urgent need for maintenance is the Salang Tunnel. Rehabilitation of the tunnel has been completed, but due to snow and freezing temperatures in winter and a lack of maintenance in the drainage system, the road surface condition has severely deteriorated. Maintenance is urgently needed to protect the tunnel's operating condition."* The ICR also stated that *"…after this emergency phase of development, a next project, if any, should focus more on sector reform and capacity building, and on building up the sustainability of the sector's development."*

47. In the period between 2010 and 2013 a total of about US$ 30 million were spent by ISAF and USAID for emergency repairs to keep the Salang pass open and facilitate the large-scale pullout of ISAF military forces from Afghanistan, which involved a massive transport operation across the Hindukush Mountains. However, the high traffic volume and the absence of truck overload controls, and of appropriate road asset management, again led to accelerated road deterioration. As a result, the Salang pass today is again in a very bad condition which, if not remedied, will result in longer-term closures of the pass.

48. The capacity expansion of the Salang pass through the construction of a second parallel tunnel and widening of the road remains an important goal of the GIRoA. However, after several years of ultimately unsuccessful attempts to mobilize funding for such a project, the GIRoA and the Bank have now agreed on the proposed project described in this PAD, as an alternative which is meant to ensure a reliable Trans-Hindukush road connection with sufficient capacity for the coming 10 to 12 years. The establishment of appropriate arrangements for the management,

operation and maintenance of the two roads covered by the project is an essential part of the project. This will include financial arrangements (tolling of the roads) and institutional arrangements (setting up of a special purpose company for O&M).

V. KEY RISKS

A. Overall Risk Rating and Explanation of Key Risks

49. *Overall project risk is rated as "High".* There are many different risks which could materialize during the implementation of the project and would negatively affect the achievement of the PDO. These risks are listed in the SORT table (see PAD Data Sheet) and are described in detail below.

a) *Specific project risks.* The specific risks which could potentially affect the achievement of the PDO are as follows:

- *Political and Governance:* There is a high risk to the project development objective stemming from Afghanistan's overall political situation and governance context. The serious security issues prevailing in the country will most likely affect project implementation. The high degree of political instability, fragility, uncertainty or transition could also derail project implementation.
- *Macroeconomic:* There is a low risk that macroeconomic issues could affect project implementation, especially since the project will be funded mostly by a grant and does not require larger-scale funding from the GIRoA, and does not otherwise depend on macroeconomic policies.
- *Sector Strategies and Policies:* This relates essentially to the Government's strategy and policy for road management and maintenance which have been described earlier in this document. While there is a low risk that the existing issues will affect the implementation of the project, there is a substantial risk for the medium- and long-term sustainability of the road infrastructure built through the project, despite the numerous ongoing efforts by many parties (including the Bank) to improve road management and maintenance.
- *Technical design:* There is only a moderate risk that the existing technical design (and the updates yet to be done) would be of insufficient quality. This risk is mitigated through the review of the design by Bank staff and other technical specialists.
- *Institutional capacity:* The project will be implemented through a new PMT which has been set up at MPW which is composed of experienced civil servant staff of the MPW and complemented by specialized consultants providing *Implementation Consultant* services to support the PMT's civil servant staff. Although the MPW has already successfully implemented many road sector projects, the risk related to institutional capacity is nevertheless rated *high*, due to the large size and the technical complexity of the project. More importantly, it will be the first time for the civil servant staff to take the lead in project management, with consultants only providing support. As a mitigation measure, MPW has agreed to ensure that the

appointments to key PMT positions (team leader, deputy team leader, and the divisional directors of engineering, procurement and FM) shall be stable and based on proven technical capacity and experience. Any replacements, if they become necessary, shall be with persons of the same level of educational background and proven capacity.

- *Fiduciary:* As described earlier, the Government's fiduciary management systems (FM and Procurement) were found to be deficient, leading to important delays in procurement and payments. Payments typically take between 40 and 60 days, and often much longer, instead of the 28 days stipulated in most contracts. The Government and the Bank are working together (beyond the scope of this project) to simplify payment procedures. At the present time the fiduciary risk is rated *substantial*, despite the mitigating measure of using *Implementation Consultant* services to support procurement and FM functions at the project implementing agency.
- *Environment and Social:* The main risk here is related to land acquisition and resettlement which will have to take place along the B2B road. Given the social and security environment in the area of the B2B road and the Government's limited implementation capacity, the risk is rated as high.
- *Stakeholder:* At the present time, the project is universally supported by all key stakeholders at the national level, due to its clear and obvious importance for Afghanistan. At the local level, along the alignment of the B2B road, there is also strong support for the project. There is however a risk that the local insurgent forces (Taliban) who are now expressing support for the project may change their attitude later due to broader political reasons. This risk is mitigated by the implementation strategy to be applied, including procurement packaging, which has been designed to generate local support as much as possible. The remaining risk is rated moderate.
- *Other risks:* There are several other, very specific risks directly related to the ability to estimate contract prices and the overall project cost. These risks are described in detail below. These "other risks" are rated as high.

b) *"Other risks"- Difficulty of obtaining a precise project cost estimate.* The proposed project presents three specific risk factors which make price estimates for civil works more difficult than normally. These described below and ranked in the order of their magnitude and importance:

- *Security environment, specifically in the project area:* This is the most important factor affecting the ability to estimate project cost. At the time of bidding, it is uncertain how contractors and consultants will price the constantly evolving security risks that will most probably affect construction work and consultant services in the project area, especially since they may not be able to obtain security-related risk insurance in the market. This factor, which is largely outside the control of the Bank or MPW, could drive up project costs by as much as 30 percent. This would be despite the mitigating measures which are to be adopted, namely the strategic packaging of civil works contracts in smaller lots, in order to help overcome local tribal, community and security issues, especially for the Baghlan to

Bamiyan sub-project which crosses Taliban-controlled areas.

- *Supply/demand situation:* This is the second most important factor affecting the ability to estimate project cost. There is only a rather limited number of local civil works contractors in Afghanistan and an even more limited number of international contractors willing to work there. There are nevertheless still many civil works contracts being put out for tender in Afghanistan. There is the risk that at the time of bidding, demand for civil works will be higher than the locally available supply and that this situation may drive up prices by up 25 to 30 percent, or attract bidders with insufficient qualifications and technical capacity, or both. It could also happen that some contracts do not attract qualified bidders at all. In order to mitigate this risk, MPW is assessing the road construction market and will attempt to phase the launching of large new road construction contracts to avoid bunching.
- *Technical/Engineering uncertainties:* This third risk factor is much less important than the previous two. It results mainly from the fact that the exact final scope of repairs in the Salang tunnel and snow galleries is not known yet, pending the needed detailed technical assessments which are yet to be carried out. However, the total value of those work items constitutes only a relatively small share of total project costs. Even a large increase in the final cost for those items would only affect the total project cost by about 5 to 10 percent at most.

50. *Security risk.* Much of the B2B road alignment passes through an area which is essentially controlled by the Taliban and/or other local groups. The Government has so far not been able to assert effective control of this area and is unlikely to be able to do so anytime soon. However, MPW staff and local consultants employed by MPW can presently nevertheless work in those areas and will actively monitor project implementation. In informal consultations held by MPW staff, the Taliban have expressed support for the project, provided that local groups benefit enough from construction and operation of the road. The project includes measures to mitigate the security risk and to ensure continued support by the Taliban and other local groups. These mitigation measures have been defined with participation of various parties involved, namely MPW and its site office staff, site engineers, contractors (both international and domestic) and local communities: (i) The design of the civil works emphasizes labor intensive work methods on bridges, culverts, retaining walls and other structures. (ii) Civil works are packaged into smaller lots so that domestic contractors can be involved instead of foreign contractors. (iii) The project implementation arrangements include an Inter-Ministerial Steering Committee which will, among other roles, ensure close coordination among the security-related stakeholders such as the ministries of Interior and Defense.

51. In the light of the above issues, the presently stated project cost of US$255 must be considered a rather imprecise cost estimate. There is a significant risk that either (i) the project will cost more than expected and additional financing may be needed during project implementation, or (ii) the scope of physical works, especially for the repair and rehabilitation of the Salang road and tunnel, will be less than presently envisaged.

52. The project has been screened using the World Bank's "Climate and Disaster Risk Screening Tool". The screening confirmed the need to (i) apply appropriate engineering design

standards, and (ii) apply appropriate methods for managing, maintaining and operating the two project roads.

VI. APPRAISAL SUMMARY

A. Economic Analysis

53. The fundamental aim of the project is to facilitate road travel across the Hindukush mountain range and to significantly reduce the risk that traffic is interrupted for long periods of time due to either failures of the Salang tunnel or snow galleries, or by other blockages of the road which could be of a technical/engineering nature, or weather-related. The largest part of the quantifiable project benefits accrues through the expected reduction in half of closure times of both roads, which results in a reduction of inventory holding cost. Other quantifiable benefits are those which typically occur in road projects, such as reductions in vehicle operating costs, reduced accident costs, etc.

54. The HDM-4 model was used to carry out the economic analysis, with project analysis time frame of 18 years from 2015 to 2033. The benefits resulting from reduced road closure times were calculated exogenously and imported into the HDM-4 analysis. The discount rate used is 12% per annum, and a sensitivity analysis of the results was carried out with (i) a 20% increase in capital costs; (ii) a 20% decrease in total benefits; and (iii) the combined increase in capital costs and simultaneous decrease in benefits of 20% each. The results are summarized in the table below.

Summary of Results of the Economic Evaluation

Alternative	Salang Pass (Sabar Seraj-Kinjan)		Baghlan – Banyam (B2B)		Combined Project	
	NPV ($m)	ERR (%)	NPV ($m)	ERR (%)	NPV($m)	ERR (%)
Base case (Rehabilitate and Upgrade)	493.4	73.8	26.7	15.2	520.1	44.5
20% increase in capital investment costs	480.0	63.6	6.0	12.6	486.0	37.9
20% decrease in project benefits	381.2	61.5	1.1	12.1	382.3	36.6
20% increase in costs AND 20% reduction in benefits	367.8	52.8	-19.6	9.9	348.2	31.2

55. As can be seem from the results shown in the above table, the B2B road as a stand-alone project would just barely be economically viable given the low volume of traffic (even with additional traffic induced by the road). It is nevertheless a necessary part of the project. The Salang Pass rehabilitation on its own is highly viable given the high traffic volumes and the impact of reducing road closures on inventory holding costs. It could however not be done without first establishing the B2B road as a bypass road. The overall combined ERR for both roads is 44.5%

and the net present value is US$ 520.1 million at a 12% discount rate. The sensitivity analysis (varying capital costs and overall benefits) show that the ERR is robust and varies between 38% and 31% when costs are increased by 20% and benefits reduced by 20%.

B. Technical

56. *Preparation of detailed design for the B2B road.* The original detailed engineering design for the Baghlan to Bamyan road was prepared by the consultant consortium of LBI/B&V under USAID funding in 2009. MPW with the support of UNOPS is presently carrying out a review of the engineering design which will result in various improvements, including cost reductions and changes of the road alignment with the objective of minimizing the need for land acquisition and resettlement. The design review of the first segment (out of the six segments) including the revised cost estimates has already been completed during project preparation and the bidding documents will be ready for the launching of the procurement process by early October 2015. The design review and enhancement for the remaining five road segments is expected to be completed by April 2016.

57. *Pavement design standard for B2B road.* MPW and the Bank team agreed during project preparation that the pavement of the B2B road will be designed from the start to a standard which will allow the road to withstand the full diverted traffic load of the Salang Pass during prolonged periods. The option of doing a "light" pavement (surface dressing) initially and adding a stronger asphalt concrete pavement later was rejected by mutual agreement.

58. *Preparation of detailed design for Salang Pass and tunnel.* Defining the scope of the needed civil work for the repair of the Salang Pass (including the road, tunnel, snow galleries and other structures) is technically more complicated than for the B2B road. MPW has already started a detailed condition survey of the pavement and structures along the Salang Pass which is planned to be completed in late 2015. The preparation of the detailed engineering design for the civil works will require further technical assessments including geotechnical investigations and other specialized studies. As per the plan presented by MPW the detailed design work for Salang Pass will start in March 2016 and will be completed by June 2017. The design will be carried out by the MPW team with technical support from the Implementation Consultant. In the meantime, a detailed geotechnical investigation of the Salang tunnel will be carried out as soon as possible by a specialized consultant to assess the structural damage of the tunnel and make proposals for remedial measures. This should include the use of a hand-held ground-penetrating radar device to detect voids and large cracks behind the tunnel walls which could affect the structural integrity of the tunnel. The consultant could be either local or international and should be hired based primarily on technical capacity and experience for tunnel assessments.

59. *Measures to avoid premature deterioration of pavements on Salang Highway.* The teams from MPW and World Bank agreed that it is necessary to fully address the issue of the repeated premature deterioration of pavements which has been observed on the Salang highway. This was caused mostly by the use of snow chains or steel spiked tires mounted on (often overloaded) trucks during the winter months. A comprehensive solution package will be put in place under the project which will include

- traffic management measures, in particular the shifting of traffic from the Salang Pass to the B2B road during heavy snow days. This could be done by involuntary and by voluntary measures, such as temporarily eliminating tolls on the B2B road on those days when snow chains would be needed on the Salang Pass;
- reducing the use of snow chains as much as possible, by providing better snow and ice clearance and other appropriate measures;
- prohibiting steel spikes and certain types of snow chains which have proven to be particularly damaging to pavements;
- strict control of overloaded vehicles (axle load control);
- use of appropriate high-strength and abrasive-resistant pavement design.

60. *These* measures, and especially the axle load control, can be applied without the need for new legislation.

61. *Future arrangements for Operation and Maintenance of the two roads*. The discussions held between the teams from MPW and the World Bank showed that there clearly is a shared view on the need to create a strong setup to ensure the sustainable management and maintenance of the two Trans-Hindukush roads. During the past 15 years more than US$ 100 million have been spent on the Salang pass, but much of this money has been wasted due to the absence of good asset management which resulted in quick and repeated road deterioration. There is a strong determination by MPW and the World Bank to not repeat the mistakes of the past. The proposed project will be used to design and implement an incentive- and performance-based mechanism ensuring good management and preservation of the two Trans-Hindukush roads. This will include elements of (i) asset protection, by not allowing the use of the roads by overloaded trucks and by strongly reducing the use of snow chains; (ii) maintenance financing, by introducing tolling of both roads, and (iii) creating financial incentives for complying with service quality levels. Afghanistan cannot afford going through another costly cycle of large investments in the Trans-Hindukush roads followed by the rapid deterioration of the roads within a few years.

62. *Feasibility of PPP arrangements.* It is likely that the future arrangement for O&M or the two project roads will involve the private sector through some form of PPP under which a firm will operate combined stations for axle load control and tolling, collect revenue, and plan and execute management and maintenance of both roads. Although Afghanistan presently does not have a comprehensive legal framework to promote PPP, this would probably not prevent the project to develop a pilot PPP scheme with a demonstration effect for what could be done elsewhere in the country. It has already been agreed that MPW and the Bank will involve IFC in the development of the O&M arrangements. It is hoped that by developing a real example for road asset management by the private sector, the broader policy dialog between the Bank and the Government on infrastructure asset management and PPPs could be advanced. This dialog would be helped by the existence of the Inter-Ministerial Steering Committee which has been created for the project and which could assure timely leadership, policy support and strategic direction.

63. The project will include (during the 18 months) a study to analyze the options for the long-term O&M arrangements. The selected option, probably a type of maintenance concession or management contract, will then be implemented as part of the project. It is expected that the future operator of the project roads will be in place by the end of the third year of project implementation,

when the upgrading of the B2B road is completed. The use of remote sensing and of IT-based data transmittal on axle loads, traffic count/classification and the resulting toll revenue will be used to eliminate much of the human interface at tolling and axle load control, and greatly reduce opportunities for corruption.

C. Financial Management

64. The World Bank team has assessed the fiduciary arrangements for the project and found them to be adequate for the purposes of the project, subject to implementation of mitigation measures agreed with MPW. The residual FM risk, after applying the risk mitigation measures, is rated as *Substantial.*

65. The FM arrangements are at two levels – the central level and the implementing agency level. Country systems are used for budgeting, accounting, disbursements, internal audit and external audit.

66. At the central level, accounting and audit functions for the proposed project will be undertaken by MoF and SAO (Supreme Audit Office) respectively, with technical assistance supported under the ARTF-financed Public Financial Management Reform Project II. The project activities will be implemented by the Ministry of Public Works through the Project Management Team that has been set up for this purpose. The PMT will benefit from technical assistance from UNOPS until August 31, 2016 under an existing contract and thereafter through Implementation Consultant services. The overall responsibility for project financial management will rest with the PMT. The FM capacity in MPW is very weak and will therefore be supplemented by (i) one international FM consultant with adequate experience and (ii) two national FM consultant staff (mid-level positions) with relevant experience working on donor funded projects and also on government systems. These positions will be hired initially through UNOPS and thereafter through the IC. In the event MPW is unable to hire a firm to provide the IC services, MPW will fill these positions with individual consultants. The TORs for these positions will be reviewed by the Bank. The national consultants will be embedded within the MPW finance department and work closely with the civil servants to train them to carry out the work efficiently. After effective transition, the international position will be phased out.

67. Project transactions will be recorded in AFMIS (Afghanistan Financial Management Information System) by MoF. At the same time, MPW's finance department will maintain subsidiary books of records using a simple off-the-shelf accounting software. MPW's finance department will prepare Interim Financial Reports (IFRs) with assistance from the FM consultants, these IFRs will be submitted to the Bank within 45 days from the end of the quarter. MPW will follow the Afghan fiscal year (December 21 to December 20) for project accounting and reporting.

68. Project funds will be channeled through a segregated Designated Account (DA) in US$ to be opened at the Da Afghanistan Bank (DAB, Central Bank). The DA will be maintained and controlled by the MoF, however MPW's finance department will be responsible to manage the DA and carry out periodic reconciliation. All project payments will be centralized in Kabul, and no project funds are expected to flow to the provincial levels. Disbursements from the IDA grant will be made using advances, reimbursements and direct payments. The project will follow the

traditional SOE-based disbursement method. All withdrawal applications to the Bank, including advances, reimbursement and direct payment applications, will be prepared by MPW and submitted by MoF. Copies of supporting documentation for all project payments will be maintained at MPW.

69. As part of the World Bank's broader support of the Afghan Government, it carried out a broader Public Finance Management (PFM) review in 2013 and a specific a FM capacity assessment for MPW in 2015. It was found that the Government's and MPWs FM systems do not have the capacity to process payments in a timely manner, due to the existence of procedural bottlenecks. Bank and MoF are engaged in a dialogue to address the bottlenecks and streamline the processes for both funding allotments and payments, and it is expected that some simplifications will be agreed for implementation in FY1395. The processing timeline within MPW will also be reduced through removal of non-value added steps and delegation of authority for payments. These improvements will greatly benefit the implementation of the proposed project.

70. Internal audits for the project will be done by the Internal Audit unit of MoF, similar to the arrangement for other World Bank funded/administered projects. The annual project audit will be carried out by the Supreme Audit Office with technical assistance from the Audit Agent. Annual audited project financial statements will be submitted within six months of the close of GoA's fiscal year. There are no overdue audit reports, no overdue IFRs and no ineligible expenditures under ongoing or closed projects implemented by MPW. Further details on the arrangements are presented in Annex 3.

D. Procurement

71. Procurement of Goods and Non-Consulting Services shall be carried out in accordance with the World Bank "Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published by the World Bank in January 2011 (Revised July 2014). For the selection of consultants, the World Bank "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published by the World Bank in January 2011 (Revised July 2014) shall be applied. Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006 and updated January 2011, shall apply to the Project.

72. The overall responsibility for procurement and contract management under the project will be with the staff of the Project Management Team (PMT) which has been set up within MPW. The PMT will be supported by the IC. PMT staff will act as the World Bank's main interlocutors for all procurement aspects of the project. The PMT will also be responsible for contract management. Training on procurement and contract management will be provided to the staff of the PMT and designated officials of MPW. MPW's own staff of civil servants will be complemented by external procurement and contract management specialists (under the *Implementation Consultant* support) who will have dual responsibilities – functional tasks and transfer of knowledge / capacity building to MPW civil servant staff. To this end, the externally hired project procurement staff will be embedded within the MPW procurement department to work alongside with the civil servants.

73. An assessment of the procurement capacity of MPW was carried out, keeping in view that Implementation Consultant services will be available to support project preparation and implementation. It concluded that that MPW has procurement staff with experience in National Competitive Bidding and Shopping procedures. Some MPW staff and especially some of the external local consultants already working at MPW have been previously exposed to procurement procedures of international financial institutions such as the World Bank. Given the nature of this Project which requires Selection of Consultants and International Competitive Bidding for procurement of large contracts for civil works, the involvement of the Implementation Consultant will be necessary at least during the initial years of project implementation. The World Bank's Procurement Prior Review (PPR) thresholds for the project were set based on the procurement risks rating assuming existing procurement capacity. The World Bank will provide increased implementation support during missions (initially at least three per year), during meetings with PMT staff as needed and also through the use of information technology for effective communication. The implementation support through missions may decrease as MPW's capacity increases.

74. An initial Procurement Plan (PP) was prepared by MPW and agreed with the Bank team. A summary of the PP is included in Annex 3. The PP will be updated periodically during the life of the project, when new information becomes available which warrants changes in the plan.

75. The IC to be hired will support MPW in project implementation, including for procurement and contract management. The procurement risk assessment was done in consultation with MPW and risk mitigation measures were identified. The procurement risk is rated as high, but becomes *substantial* with the implementation of agreed risk mitigation measures, including the participation of the Implementation Consultant. The risk will be periodically re-assessed, in particular after the end of the transition period when a decision needs to be taken on the phasing-out of the Implementation Consultant.

76. *Road construction industry assessment.* An assessment by MPW of contractors and consultants (local and foreign) active in the construction of road infrastructure in Afghanistan is in progress. The result of this assessment will help the Afghan government to design the most appropriate procurement strategy for the road sector. During the discussions it was agreed that MPW will extend this assessment by applying the qualification criteria normally applied under World Bank's standard bidding documents. The Bank is able to provide technical guidance to MPW and their IC in carrying out the industry assessment.

E. Social (including Safeguards)

Social Safeguards

77. The World Bank's Operational Policy on Involuntary Resettlement (OP 4.12) is triggered by the project because the rehabilitation and upgrading works under Component 1 will require land acquisition at some locations. The project will undertake physical works on two separate roads, namely the B2B road and the Salang Pass road. On the Salang Pass, civil works will be limited to repairs, rehabilitation and maintenance located entirely within the existing right-of-way of the road, with no widening which would require land acquisition or resettlement. On the

Baghlan to Bamiyan (B2B) road, works will upgrade the existing earth road to paved standard. The works will mostly take place within the existing right-of way of the road, but widening of the road will require land acquisition at some locations.

78. An exhaustive Social Impact Assessment (SIA) has been undertaken along the B2B road, which also assessed the possibility of road design alternatives to reduce the need for land acquisition and the resulting social and financial implications. The SIA included a socio economic baseline study which was commissioned by USAID in 2009. A follow up survey was conducted in September/October 2014 to establish the validity and reliability of the 2009 study and to update the data in the current context. As per the current assessment estimates, as many as 650 to 700 families will be affected by land acquisition and lose a part of their residential, commercial or agricultural properties along the B2B road corridor. A detailed 100% household census was carried out by the client agency for the first segment of the B2B road and the RAP for this first segment has been prepared and disclosed in-country and through the World Bank's InfoShop on May 20, 2015. A stand-alone Resettlement Policy Framework (RPF) has also been prepared which will guide the preparation of the RAPs of the other five segments of the B2B road, for which the detailed design has not yet been completed and where some changes of alignment may still be possible. The RPF provides the entitlement matrix, eligibility criteria and guidelines for procedures, consultations and for the establishment of a Grievance Redress Mechanism (GRM) which are to be followed under project. The RPF was disclosed in-country and through InfoShop on May 28, 2013. RAPs for the other five road segments will be prepared by the PMT and submitted to the Bank for approval. The Government will be responsible for implementing the RAPs prior to commencement of civil works in the vicinity of the affected persons.

79. The World Bank's operational policy on Physical Cultural Resources (OP/BP 4.11) is also triggered as a precautionary measure. The ESIA identifies that there is a structure presumed to be from Buddhist times at Km134 of the B2B road, in the area of the sixth road segment. This is the only observed cultural site within the vicinity of the road. The structure is approximately at 50 meters distance from the road. The site-specific ESMP for the sixth segment of the B2B road will include appropriate mitigation measures to prevent any interference during project works. The ESIA also provides guidance on proper handling of chance finds should they be encountered during the execution of civil works.

Gender aspects

80. As learned during consultations with the local communities along the alignment of the roads (which included both men and women) the safety of pedestrians and livestock is one of the key concerns of the potential project beneficiaries. This is especially valid for the B2B road which will be upgraded to paved standard. The upgraded road will attract more traffic and result in a higher average speed of vehicles along the road, which in turn could result in more traffic accidents. The project will address this aspect through appropriate road safety design elements for the road works. This is expected to avoid a potentially large increase in pedestrian injuries and fatalities. Despite the lack of gender-specific data on pedestrian traffic in settlements along the road, it appears that any measures to improve pedestrian safety will be of particular benefit to women and children who are likely to walk between their homes and places of social and other daily activities (food markets, schools, health clinics, etc.).

81. Although the proposed project does not include directly gender-specific activities, it is expected to have several indirect positive impacts on women. Under Component 1, project monitoring will ensure that the construction of the new highway in those areas that are close to settlements would not hamper safe access to key social services, particularly those that are primarily used by women, including hospitals, schools and childcare centers.

82. Road safety issues are relevant from the perspective of gender equality. Afghanistan is among the countries with very high road traffic injury death rates worldwide. There is however very little available road traffic injury and death data, and the data is not segregated by gender. Consistent with the data on traffic injuries and deaths is the high adult mortality rate and low life expectancy especially among men in Afghanistan, which besides the high traffic crash risk is also the result of other factors including tobacco use and violence. The lack of gender-disaggregated data for traffic deaths makes it more difficult to understand to what degree traffic accidents contribute to specific mortality rates among the prime age men and women. As part of the Bank's sector dialog with the Government, efforts will be made to convince the Government to collect gender-disaggregated data on road traffic injuries and deaths.

83. The updated SIA indicates that the road improvements to be done under the project are unlikely to cause severe negative impacts on any special population group, including women. The study also shows that none of the affected families who are expected to lose a part of their land or properties are headed by women. The client has conducted separate meetings for men and women in connection with land acquisition and resettlement impacts. There have also been consultations conducted with different groups, including with women, for feedback on road design options, in particular with regards to roadside facilities, road safety of pedestrians and livestock, and road crossings. The views of both men and women have been taken into consideration, and have been included in the final road design. The road improvements are expected to have broader social benefits for both men and women in the form of improved access to social services, markets and jobs.

Broader social benefits

84. In addition to the positive economic rate of return calculated with the HDM-4 model, the upgraded B2B road and the repaired Salang Pass will generate a number of other important, albeit less quantifiable, socioeconomic benefits. Among these is improved access to social services, markets and jobs for the communities residing along the roads, and the project will therefore contribute to improving living standards in the project area. The road improvements are also expected to result in improvement in the incomes and result in reduction of poverty in the project's area of influence. According to findings from the recent follow-up socio economic survey, about 60 percent of households were found to be 'extremely poor' with an income of less than US$1 per capita per day.

Public Communication and Citizen Engagement

85. The proposed Trans-Hindukush Road Connectivity Project is a "linear infrastructure project", with the largest number of beneficiaries being physically located outside the area where

the infrastructure is actually built. Another such project has been the CASA 1000 electricity transmission line project. Such projects require specific efforts to ensure that local communities support the project, as described elsewhere in this document. This is even more important under this project since much of the area of the B2B road is controlled by the Taliban and/or other local groups. MPW and the Bank team have agreed that a strong communications and outreach campaign, and information-sharing activities, will be directed towards relevant project stakeholders within the geographical area of the project. Road users and the broader public, as the other major stakeholder group, will also be targeted. A multi-media communications strategy will be at the core of information sharing efforts, designed with the aim of ensuring that information on the project's objectives, implementation progress and actual impacts is conveyed to local groups, interested members of Government, road users and the citizenry more broadly. To ensure that communities living in the B2B and Salang Pass corridors are effectively reached, the communications strategy will take into account their information infrastructure access, literacy rates, and language. In addition, it will also ensure that feedback loops (perception surveys, community participatory monitoring and grievance handling mechanisms) between the road corridor communities and the implementing agencies are put in place and regularly utilized. A specialized consulting firm will be hired under the project to prepare and implement a Communications and Citizen Engagement Plan for the entire duration of the project. During the project preparation period and until the communication consultant is in place, MPW is already handling the communication with the local communities to ensure (i) public awareness about the cut-off date for land-related issues; (ii) awareness about the existence and functioning of the Grievance Redress Mechanism; (iii) summary information on provisions and implementation of the Resettlement Action Plan. MPW has also conducted informal consultations with the local Taliban representatives who expressed their support to the project.

86. *Information strategy about the introduction of tolling and the new O&M arrangement*. The introduction of tolling and of the new O&M arrangements for the two project roads will also need to be accompanied by the public communication strategy, with two objectives. The first objective (technical objective) will be to ensure that road users have the necessary information to be able to use the two Trans-Hindukush roads without problems. The second objective (social objective) of the Public Communication Strategy will be to inform the broader public about the reasoning for the new arrangement for managing the roads and the benefits it will generate for the country as a whole and for road users specifically.

F. Environment (including Safeguards)

87. The likely environmental impacts of the project are associated with the civil works to be carried out under project Component 1, for the upgrading of the B2B road and the repair and maintenance of the Salang Pass road. Project Component 2 will be limited to institutional/capacity development and to project management related tasks which will not have environmental impacts.

88. Given the mountainous terrain through which the B2B road corridor passes and the extent of construction works required, significant environmental impacts related mostly to the construction activities are to be expected. For instance, extensive cut and fill works will be required. Initial engineering surveys indicate that approximately 3.2 million cubic meters of material will be cut and 4.2 million cubic meters will be required as fill and significant cut material

will be reused as fill material. This would require the operation of large construction equipment to remove, place, store, dispose and otherwise manage these large volumes of material. These activities would have significant impacts on air quality, surface water quality, and land and will pose significant road safety concerns. Similar activities will also take place at quarry and borrow pit locations with likely similar impacts. Management of erosion will also be critical, as slopes will be disturbed or further exposed following the removal of vegetation cover, excavation and blasting works, etc. as part of the cutting and filling process, requiring good construction and engineering management so as to reduce the transportation and deposition of soil material downstream. Construction and worker camps will also be established and these will pose potentially significant impacts associated with managing and disposing of fuel, oils and other lubricants (new and used), sewage and solid waste generated by workers, which if not managed appropriately could impact water quality and pose public health concerns for nearby communities. These impacts pose significant risks to the hydrological characteristics of the corridor as well.

89. Once the construction works are completed, and the road is commissioned and operational, the nature and intensity of the operational stage impacts will change and will be reduced significantly. The operational impacts will mostly be attributed to air quality impacts due to larger traffic volumes (freight trucks) plying the corridor and road safety concerns. Habitat fragmentation and loss, and other impacts on flora and fauna are deemed to be of low risk given that the road has been operational in these areas for years and the absence of flora and fauna of significant ecological value or conservation value in the immediate area of the B2B corridor.

90. Furthermore, impacts on Physical Cultural Resources may occur as the wider project area is also home to several notable historic items resulting from various influences dating back to the 5th century and its location along the ancient silk route. Given the rich cultural heritage of Bamiyan, it could be possible that chance finds could occur during project works. An adobe castle structure has been observed at KM 134, at a distance of 50 meters off the project road.

91. The repair and rehabilitation of the Salang pass road will only have minimal adverse impacts and these will be mostly associated with noise, air pollution and traffic disruption during the physical works. Additional impacts are foreseen in case of lack of adequate occupational health and safety measures during the rehabilitation works, as the repair of the Salang road involves tunnel repair works (including sealing of cracks and leakages in the ceiling of the tunnel) and repair of snow galleries and other structures.

92. Lastly, the project is not expected to present cumulative impacts in the project areas as both the B2B road and the Salang Highway are both existing roads that are only being rehabilitated and upgraded. Hence there are no or very little cumulative impacts from the addition of this project as the road has existed in these corridors for many years. Therefore, based on the land use and geophysical terrain of this corridor, it is to be expected there will not be many additional concurrent investments in other modes of transport in this fragile region as well. For these reasons, the rehabilitation and upgrading works planned under this project are not expected to have cumulative impacts.

93. Given the above considerations, the proposed project triggers the Bank's Operational Policies on Environmental Assessment (OP 4.01) and Physical Cultural Resources (OP 4.11) and

consistent with the requirements of OP 4.01 the project has been assigned an EA category A. In compliance with this policy the Government has prepared a full Environmental and Social Impact Assessment (ESIA) and corresponding Environmental and Social Management Plan (ESMP) for segment 1 of the B2B road, for which the detailed engineering design has been finalized. For the remaining five segments of the B2B and also for the Salang Pass road, detailed and finalized engineering designs are not yet available and therefore the Government has prepared an Environmental and Social Management Framework (ESMF) to guide the preparation of the required documents for those road segments.

94. Below is a summary of the Environmental and Social Documents required for full compliance with the Government's and the Banks requirements:

- *Environment and Social Impact Assessment (ESIA)* for B2B road Segment 1 (completed and disclosed)
- *Resettlement Action Plan (RAP)* for B2B road Segment 1 (completed and disclosed)
- *Environmental and Social Management Framework (ESMF)* for the whole Project (completed and disclosed)
- *Resettlement Policy Framework (RPF)* for the whole Project (completed and disclosed)
- *Environmental and Social Management Plan (ESMP)* for B2B Segment 1 (completed and disclosed)
- *Environmental and Social Management Plan (ESMP)* for B2B Segments 2-6 – will be prepared by the MPW PMT environmental specialists (supported by the IC) concurrently with the Detailed Engineering Designs for these Segments as required in the ESMF. These documents will have to be cleared by the Bank and disclosed locally and at InfoShop, prior to initiating works on the relevant segements.
- *Environmental and Social Management Plan (ESMP)* for Salang Highway – will be prepared by the Civil Works contractor as required by the ESMF.

It was noted that for the Salang Pass, a RAP will not be necessary since no land acquisition or resettlement is expected.

95. *Consultations and disclosure.* Consultations were carried out during 2009 with male and female community members under the socio economic study commissioned by USAID. Subsequently, in 2014 and 2015, consultations on the ESIA and ESMF were carried out along the B2B road alignment together with the stakeholder agencies, as well as consultations with the affected communities and beneficiaries of the first segment of the B2B road. Separate consultations were conducted with women, particularly with the affected families in the first segment of B2B road. Consultations with the affected communities and beneficiaries from the five other segments are ongoing and these consultation will be reflected in the subsequent RAPs. The ESIA, ESMF and RPF have also been translated into the local languages (Pashto and Dari) for local disclosure.

96. The ESMP documents which are yet to be prepared for Segments 2 to 6 of the B2B road and the ESMP for the Salang Highway will be subjected to meaningful and participatory public consultations in the project area. Furthermore, the RAPs and ESMP's will be locally disclosed in English and also in Dari and/or Pashto, which are the languages spoken in the project areas.

97. *Institutional arrangements for safeguards.* The MPW PMT will include an Environmental and Social Safeguard Management Unit (ESMU) which will have overall responsibility for coordinating, implementing and compliance monitoring of the Environmental and Social safeguards commitments and requirements of the Project. The ESMU so far has one qualified and experienced environmental specialist who participated in the mission. A social safeguards specialist will be hired as soon as possible. MPW will also delegate some of its civil service staff to the ESMU so that they work alongside the two experienced specialists and acquire the necessary skills and capacity for such positions. At least one of the staff of the ESMU shall be female to facilitate the consultations and interactions with female project-affected persons. The ESMU will place some of its staff to at the regional office of MPW closest to the site of civil works under the project.

98. *Environmental and social management at contractor's side.* The civil works contracts will stipulate that each contractor will have a full-time Environmental and Social Safeguard Officer on the site who will be responsible for all environmental and social safeguard issues and implementation of the respective site specific ESMP's.

99. *RAP implementation.* MPW has allocated budget resources to cover compensation payments to the affected families within the first segments of the B2B road. This budget still needs to be approved by the Council of Ministers. MPW will soon initiate to draft a request to the Council of Ministers for budget approval, including the budget for livelihood restoration (i.e. affected businesses within the right-of-way of the road) which have been outlined in the RAP for the first segment. Compensation payments to the affected families will be made through a government commission to be assigned by the Council of Ministers. MPW will also seek cabinet approval for establishing that commission. The B2B road works will also have impacts on public properties (e.g. cemetery, irrigation facilities, etc.) and MPW may contract with local communities to conduct clearance and/or relocation of such community assets, or similar actions needed to resolve local community issues.

100. *Third party monitoring of RAP implementation.* MPW confirmed that it will use the services of a third party monitoring agent to conduct monitoring of RAP implementation after such implementation is essentially completed.

G. World Bank Grievance Redress

101. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit www.worldbank.org/grs. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

ANNEX 1: RESULTS FRAME WORK AND MONITORING

Afghanistan: Trans-Hindukush Road Connectivity Project (P145347)

Results Framework

Project Development Objectives

PDO Statement

The project development objective is to improve road transport connectivity across the Hindukush mountain range.

These results are at	Project Level

Project Development Objective Indicators

Indicator Name	Baseline	Cumulative Target Values									
		YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	End Target
Average travel time for trucks on Baghlan to Bamiyan road (Dushi to Shibar) (Hours)	24.00	24.00	24.00	24.00	24.00	5.00	5.00	5.00			5.00
Average number of days per year when road crossing of Hindukush mountain range is not possible (Days)	20.00	20.00	20.00	20.00	20.00	20.00	20.00	7.00			7.00
Direct project beneficiaries (Number) - (Core)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8700000			8700000
Female beneficiaries (Percentage - Sub-Type: Supplemental) - (Core)	50.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00			50.00

Intermediate Results Indicators

Indicator Name	Baseline	Cumulative Target Values									
		YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	End Target
Earthworks completion rate on B2B road (Percentage)	0.00	0.00	30.00	90.00	100.00						90.00
Pavement Completion Rate on B2B road (Percentage)	0.00	0.00	0.00	0.00	50.00	100.00					100.00
Roads constructed, non-rural (Kilometers) - (Core)	0.00	0.00	0.00	50.00	152.00	152.00	152.00	152.00			152.00
Roads rehabilitated, Non-rural (Kilometers) - (Core)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.00			30.00
Salang tunnel repair works completed, including tunnel safety aspects (Yes/No)	No	No	No	No	No	No	No	Yes			Yes
Mechanism for Management, Maintenance and Operation of both the B2B road and the Salang Pass established and functioning (Yes/No)	No	No	No	No	No	No	No	Yes			Yes
Fiber Optic Cables installed along B2B road (Kilometers)	0.00	0.00	0.00	0.00	75.00	152.00	152.00	152.00			152.00
Grievances Redress System operational with registry of complaints and recording of response times (Yes/No)	No	No	Yes	Yes	Yes	Yes	Yes	Yes			Yes

Road Safety Audit of Engineering Design done and recommendations implemented during civil works (Yes/No)	No	No	Yes	Yes	Yes	Yes	Yes	Yes			Yes
Consultations with civil society and project-affected persons, with at least 30% of consultations focused on women (Number)	0.00	0.00	3.00	6.00	9.00	12.00	15.00	18.00			18.00
Capacity Building - Compliance with Performance indicators for MPW project implementation capacity (Number)	0.00	0.00	3.00	7.00	7.00	7.00	7.00	7.00			7.00

Indicator Description

Project Development Objective Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Average travel time for trucks on Baghlan to Bamiyan road (Dushi to Shibar)	No description provided.	Annual	MPW	MPW
Average number of days per year when road crossing of Hindukush mountain range is not possible	Today, the Salang Pass is closed during 20 days per year on average due to weather-related reasons, or due to repair work on the road, tunnel or snow galleries. The B2B road is not operable during rains and during much of the winter season. After the completion of civil works on the B2B road, and the repair of the Salang Pass, the number of days when neither of the two	Annual, after completion of civil works on both the B2B road and the Salang Pass.	MPW	MPW

	roads can be used should go down to less than 7 days per year on average. It is noted that closures due to military, security or political reasons should be excluded from the calculation of the average number of days.			
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 percentage.	Once, at the end of the project, when the project roads are completed.	MPW. The population from at least 11 provinces will benefit directly from the improved Trans-Hindukush roads (Parwan, Bamiyan, Baghlan, Samangan, Balkh, Jazjan, Sar-i-Pul, Faryab, Kunduz, Takhar and Badakhshan).	MPW
Female beneficiaries	Based on the assessment and definition of direct project beneficiaries, specify what percentage of the beneficiaries are female.	Once, at the end of the project when project roads are completed.	MPW	MPW

Intermediate Results Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection

Earthworks completion rate on B2B road	Earthworks are measured in cubic meters and the completion rate is stated in the construction supervision reports as a percentage of the total volume.	Annual	MPW, based on the reports from the supervision engineers.	MPW
Pavement Completion Rate on B2B road	The pavement is the last major construction item completed for a road. Pavements consist of several layers and pavement works are typically measured in cubic meters of asphalt concrete, or concrete. Progress is measured as a percentage of the total. A 100 percent completion rate is essentially equivalent to the completion of the road.	Annually	MPW, based on reports from the supervision engineers.	MPW
Roads constructed, non-rural	Kilometers of non-rural roads constructed 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.	annually	MPW	MPW
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	At the end of the project.	MPW	MPW

	towns and urban centers. Urban roads are included in non-rural roads.			
Salang tunnel repair works completed, including tunnel safety aspects	The Salang Tunnel is to be repaired. The repair works will address structural issues, drainage, tunnel lining, pavement, lighting, ventilation, electricity supply and various safety aspects. After the completion of the repairs, the tunnel should comply with those key aspects of EU Directive 2004/54/EU on the Minimum Safety of Road Tunnels that are relevant, technically feasible (given the characteristics of the existing tunnel and its location) and realistic in the Afghan context.	Annually	MPW	MPW
Mechanism for Management, Maintenance and Operation of both the B2B road and the Salang Pass established and functioning	As part of the project, there will be a study to define the most suitable mechanism for the management, maintenance and operation of the two project roads. By the end of the project, such a system should be in place. This should including a sustainable funding mechanism, an asset management system and a communication/information system for road users.	Annually, after the completion of civil works on both project roads.	World Bank Aide-Memoires.	World Bank team.
Fiber Optic Cable duct installed along B2B road	No description provided.	annual monitoring	MPW	MPW
Grievances Redress System operational with registry of complaints and recording of response times	No description provided.	Recurrent	MPW	MPW
Road Safety Audit of Engineering Design done	The engineering design of the B2B road and the Salang Pass will be subject to a	At the end of the project.	MPW	MPW

and recommendations implemented during civil works	road safety audit and the final design will incorporate the recommendations coming from the audit as much as feasible and realistic given the financial and other constraints of the project.			
Consultations with civil society and project-affected persons, with at least 30% of consultations focused on women	On average, 3 consultations will be carried out every year, starting from year 2 until project completion.	annual monitoring	MPW	MPW
Capacity Building - Compliance with Performance indicators for MPW project implementation capacity	There are seven indicators defined in the PAD. MPW will gradually increase the number of indicators it is complying with.	Annual monitoring	World Bank team	World Bank team

ANNEX 2: DETAILED PROJECT DESCRIPTION

Afghanistan: Trans-Hindukush Road Connectivity Project

The proposed project would achieve the Project Development Objective through the implementation of the two project components described below. The total project cost is estimated at US$255 million, of which US$5 million are RAP implementation costs to be covered by the Government.

1. **Component 1: Road construction and rehabilitation (US$240 million).** Component 1 will include civil works, consultant services and goods. Other, non-consulting services may also be included.

Civil works for the construction of the B2B road and the rehabilitation of the Salang road and tunnel.

a) *For the B2B road*, a detailed feasibility and engineering design study was carried out in 2009 and 2010 by the consulting consortium LBI/B&V with USAID funding. This design, with minor modifications made, mainly to reduce the need for land acquisition and resettlement, will be the basis for the bidding documents to be used. The revised technical specifications for the civil works will favor labor-intensive choices wherever feasible, such as masonry parapets instead of steel guardrails, and masonry retaining walls. It is envisaged that works will be split into six lots in order to facilitate the participation of local contractors, either alone or within consortia between local and an international contractors It is anticipated that the splitting and contracting of the civil works in six different lots, as described above, will result in a higher management effort and a longer time needed to complete the road. However, under the present circumstances in Afghanistan, the hiring of one or two large international contractors to do the entire work does not seem feasible due to the social and security implications, and the likely unavailability of international contractors to carry out all works for the entire road. It needs to be borne in mind that much of the area where the road passes through is out of the effective control of the Government and instead under control of local groups, including the Taliban. MPW recently had informal contacts with representatives of the some of the main groups, who support the project as such and agreed in principle to the contracting modalities described above. The support by those local groups will then increase the willingness of international contractors to bid for the pavement works.

b) *Design of the B2B road.* The pavement of the B2B road will be designed from the start to a standard which will allow the road to withstand the full diverted traffic load of the Salang Pass during prolonged periods, and also the expected mining traffic generated by the various mines along the B2B road. The option of doing a “light” pavement (surface dressing) initially and adding a stronger asphalt concrete pavement later was rejected by mutual agreement between GIRoA and the WB team. The finalized technical design of the B2B road will include cable ducts and fiber optic cables which will become part of the "data highway" for Afghanistan and provide a backup loop for the existing trans-Hindukush cable along the Salang highway. It is estimated that the addition of the ducts will increase the price of the B2B road by about two percent. The Ministry of

Communications and Information Technology (MCIT) will come to contractual agreements with both public and private ICT service providers who will pay annual fees to install and keep their cables in separate ducts. This is part of the broader reform of the Afghan ICT market which is being opened up to competition between different service providers, public and private.

c) *Civil works on the Salang road and tunnel* are expected to be phased during the entire length of the project. Initially, the focus will be on those works that do not require road and tunnel closures, such as the rehabilitation of pavements, bridges and other structures on the lower sections of the road. Once the B2B road is completed and is able to carry the full Trans-Hindukush road traffic, the focus will shift to those major works on the road, tunnel and snow galleries which require longer closures of the Salang Pass. The detailed design for the civil works to be carried out for the rehabilitation and strengthening of the Salang road, tunnel and snow galleries will be developed during the first year of project execution. For the *road*, works will consist of demolishing the remains of the existing concrete pavement and replace it by a new heavy-duty concrete pavement suitable for high-altitude roads with tight curves. In lower altitudes (below 2,500 meters approx.) the existing asphalt concrete pavement will be rehabilitated wherever possible by carrying out localized repairs and pavement surface milling, followed by adding new pavement layers. Where existing asphalt concrete pavement deterioration is too advanced for rehabilitation, full pavement reconstruction will be done using Stone Mastic Asphalt (SMA) technology to ensure that the rebuilt road can support the high share of heavy trucks and avoid pavement deformation. This technology has been proven especially in areas with high variations in ambient temperatures. Various types of Road Safety related works will also be included. For the *tunnel*, works will most probably consist of (i) rehabilitation or reconstruction of the under-pavement drainage system, including electric heating elements at some locations to avoid freezing in winter; (ii) demolition and full reconstruction of the concrete pavement; (iii) lining of at least some parts of the tunnel wall surface, including tunnel wall drainage at some locations with high water penetration; (iv) structural repairs at some localized parts of the tunnel, at the tunnel entrances and at the snow gallery section of the tunnel; (v) repair and upgrading of the tunnel lighting, ventilation, safety and communication systems, and power supply. The preparation of the detailed engineering design for the civil works will require further technical assessments including geotechnical investigations and other specialized studies. The detailed design work for Salang Pass including the tunnel, snow galleries and other structures will start in March 2016 and will be completed by mid-2017. Some urgent repair works may however be carried out early during the project period. The design will be carried out by the MPW team with technical support from the IC who is to provide international technical specialists. A detailed geotechnical investigation of the Salang tunnel will be carried out as soon as possible by a specialized consultant to assess the structural damage of the tunnel and make proposals for remedial measures to be included in the design. The assessment should include the use of a hand-held ground-penetrating radar device to detect voids and large cracks behind the tunnel walls which could affect the structural integrity of the tunnel. It is to be noted that the intention is to make the tunnel compliant with all realistically and technically feasible, and relevant elements of EU Directive 2004/54/EC on minimum safety requirements for road tunnels. For the snow galleries, the works will consist either of concrete rehabilitation

and strengthening works wherever feasible, or otherwise full reconstruction of those sections that are beyond repair and in danger of collapsing.

d) The detailed engineering design and specifications for the civil works on the Salang pass will include all those works needed to ensure the safety and integrity of the Salang Pass for about 10 to 15 years. However, there is a high risk that the funds available in the original IDA Grant of US$ 250 million will be insufficient to cover all the needed works, as has been explained in detail in Section V of this PAD. As noted before, resources from the IDA Grant will first and foremost be used to pay for the completion of the B2B road, for which a cost of US$ 170 million is presently estimated. This estimate is based on the existing engineering design, with 95 percent engineering confidence on scope of works and at present cost levels for major cost items such as fuel, bitumen, steel, etc. This would leave an amount of US$ 55 million for the Salang Pass. Here, civil works will be prioritized based on a risk analysis, in order to remain within the available project resources. On the Salang pass it is clear that the three highest priority interventions are (i) pavement rehabilitation for the high-altitude sections - US$ 23.8 million, (ii) Salang Tunnel Repairs, including heavy duty pavement inside the tunnel - US$ 9.0 million and (iii) snow gallery repairs - US$ 7.0 million. These three items are also the most costly elements along the Salang Pass. Concerning the pavement, the risks of variations in the scope of works are minimal. The risks of variations of scope are much higher for the snow gallery repair works (US$ 7.0 million) and for the non-pavement part of the Salang Tunnel repair (US$ 4 million). Following the detailed structural assessments of the tunnel and the snow galleries, the scope of tunnel and gallery works may face a variation between 50 to 100 percent; but this variation would be less than 5 percent of the total project cost.

e) In summary, any cost variations which could result from engineering changes are at a normal and acceptable level for this type of project. The potentially large cost variations under this project would be caused by political and market factors, such as lack of security, variations in market supply and demand, etc. which cannot easily be mitigated. As mentioned earlier, additional resources could be needed in the later stage of project implementation so as to ensure that the full set of works could be carried out, thereby fulfilling the objective of the 10-15 year additional lifespan for the Salang pass. The application of temporary and short-lived repair methods was excluded by mutual agreement between GIRoA and the WB team.

f) The design of the project roads will include all those road safety features typically applied under international good practice and feasible under the local conditions along the two project roads.

g) *Consulting services* within Component 1 will mostly consist of various contracts for the supervision of works. In addition, they will also include specialized technical expertise for tunnels, and regular technical audits by an independent international auditor to verify that road works have been executed in compliance with the technical specifications. Well-qualified and experienced international consultants would be highly desirable and it is hoped that the security conditions will develop positively so that such consultants will actually be willing to present proposals and carry out the assignments. International consultants will most likely form partnerships with local or regional consultants.

h) *Goods* to be procured under the project are expected to include a relatively small number of equipment items, mostly for snow removal, which may be need to keep in order to keep the two roads open during the project period. This equipment could initially be operated by MPW but would then be transferred to the new operating company. Other goods, such as IT equipment, may also be procured.

The project team has also considered the option of splitting the project, by separating the B2B road and the Salang Pass into two consecutive projects. It was however found that this option is not feasible, because the two parts are interlinked and need to be implemented in parallel. The Project Development Objective of improved Trans-Hindukush Road Connectivity can only be achieved by addressing the B2B road and the Salang Pass in an integral way.

2. **Component 2: Institutional support and project management (US$ 10 million).** This component will be comprised of several subcomponents:

a) *Road Safety.* This will include a review/audit of the existing design for the two roads with the specific purpose of detecting and remedying any potential design deficiencies in terms of road safety. This activity will be combined with practical training of engineers at the MPWH on road safety issues.

b) *Definition and implementation of asset management arrangements for the trans-Hindukush roads*. It has been agreed with the Government that this subcomponent will include activities to first define and then implement the most appropriate arrangements for the effective and efficient management, operation and maintenance of the newly upgraded roads, after their completion. In particular, during the first 18 months of the project it will include a *study* to prepare for the introduction of tolling and of outsourcing the management and maintenance of the roads (including axle load control). During that time there will also be a South-South knowledge exchange program with Chile and Argentina which operate a Trans-Andean road with very similar characteristics as the Salang pass. This is the "Paso Los Libertadores" between Santigo/Los Andes (Chile) and Mendoza (Argentina) which includes a 3km long tunnel at 3,200 meters above sea level and which carries a similar traffic volume including a large share of heavy trucks. The South-South knowledge exchange activity will look at the effectiveness of the existing and planned arrangements for the O&M of the two passes. The selected option for the O&M arrangements, probably a type of maintenance concession or management contract, will then be implemented as part of the project, with support from the IFC. The introduction of tolling on the two project roads, which was agreed with the Government, will ensure that the future O&M will be self-financing and will not depend on allocations of funds from the general budget. It is expected that the future operator of the project roads will be in place by the end of the third year of project implementation, when the upgrading of the B2B road is completed. Overall, the objective of this sub-component is to avoid another repetition of the quick road deterioration which was observed after earlier costly past rehabilitation projects on the Salang pass (over US$ 100 million spent during the past 15 years) due to the lack of enforcement of axle load limits, inadequate management and maintenance, the excessive use of snow chains, and the absence of incentives for good management. The Bank team includes staff from the joint IFC/WB Public Private Partnership unit and PPIAF who will work with the objective of developing an appropriate solution which may involve the private sector, or otherwise the setting up of a special purpose company owned by the State.

When defining the setup for the management of the trans-Hindukush roads, an added objective will be to generate social benefits for the communities living along the road, such as the use of small and medium-sized local firms for road maintenance whenever this is possible and efficient.

c) *Community engagement.* This will include the design and execution of MPW's information and communications system for the purpose of building public and stakeholder support for upgrading of the two roads. This is especially important because (i) large sections of the B2B road are located in Taliban-controlled areas where the support of the project by local groups is essential, and (ii) the construction works will occasionally cause disruptions of the normal traffic patterns which requires good information of road users. The communications/outreach campaign is expected to include an ICT-based citizen feedback mechanisms and a Grievance Redress Mechanism (GRM), and will also promote road safety awareness among road users. The Results Framework for the project (Annex 2) includes indicators for the GRM.

d) *Training, capacity building and institutional development.* This subcomponent will include resources to fund various types of training, capacity building and institutional development to benefit MPW and its staff, including such activities which will enable MPW to fully take over all project implementation tasks, mainly in the areas of procurement, contract management, financial management and disbursement.

e) *Project management support*, including the cost of the Project Management Team (PMT) operation.

ANNEX 3: IMPLEMENTATION ARRANGEMENTS

Afghanistan: Trans-Hindukush Road Connectivity Project

Overall Institutional and Implementation Arrangements

1. The project implementation agency will be the Ministry of Public Works (MPW). MPW has already established a Project Management Team (PMT) which is an integral part of the MPW and not a separate organization. MPW has appointed a high-level official (civil servant reporting to the Minister of Public Works) to lead project implementation. He also leads the PMT and coordinates with stakeholders. The PMT is composed mainly of civil servants of the MPW and also by some local contractual staff. Most of the PMT is already in place, but some more staff still need to be appointed or reassigned from other units of MPW. Within the PMT there are specialized units for engineering, procurement and contract management, administration, financial management and safeguards management. MPW's provincial Directorate of Public Works (DPW) from the project provinces are the client's representatives at the sites and will deal with local issues such as representing MPW as grievance redress focal points and to coordinate with local communities, provincial governments etc.

2. The key responsibilities of the Project Management Team include

- Project management, including coordination, monitoring and reporting;
- Procurement of works, goods and services;
- Preparation of monitoring reports on physical and financial progress of implementation;
- Setting up and maintaining financial accounts;
- Quality control and quality assurance;
- Implementation of the Resettlement Action Plan, including land acquisition and payment of compensation to the Project Affected Persons (PAPs);
- Liaison with the ministries / or other institutions / agencies / ministries etc. as required;
- Contract management and settlement of claims and disputes;
- Ensuring the implementation of the Environmental Mitigation Plan (EMP);
- Ensuring compliance with the Grant Covenants;
- Preparation of the Implementation Completion Report (ICR) and Operational Plan (OP)

3. Given the wider impact of this project on Afghanistan as a whole, an *Inter-Ministerial Steering Committee* has been set up for this project to ensure inter-sectorial coordination and to obtain specific support from other agencies in the areas of security, land acquisition, etc. The Committee is chaired by a high-level representative from the Presidential Office and co-chaired by the Minister of Public Works. It includes high-level representatives from various ministries and agencies, including security-related agencies.

4. The World Bank team has carried out (i) standard due diligence capacity assessments of MPW as the Project Implementing Agency and (ii) assessments[8] of the Government's budget execution process. The assessments showed that MPW has some limited technical/engineering

[8] "Improving Budget Execution Processes for Better Service Delivery, Afghanistan", World Bank November 2014

capacity which enables it to deal with technical aspects of small-scale rural unpaved roads as well as with simple bridges and structures. More importantly, however, it was found that MPW and the PMT have very substantial capacity deficiencies in all key areas (technical, procurement, contract management, financial management, disbursement, etc.) which cannot be overcome quickly and which would prevent MPW to implement the project without substantial external support during some time.

5. It was therefore agreed between MPW and the Bank that MPW will retain *Implementation Consultant (IP)* services to be provided by both international and local specialists to support the PMT and train its staff during a transition phase which is expected to have a duration of approximately three years after the start of project implementation. The length of the transition period will depend on the speed with which MPW acquires the needed capacity. During the transition phase, the periodic (semi-annual) capacity assessments of MPW to be carried out jointly by the Bank and MPW will determine if MPW has sufficient capacity to manage project implementation without such external support, or if (and in which area) the support needs to be continued. The PMT will initially rely on a combination of existing MPW staff, the Implementation Consultant team and individual consultants to carry out its functions. This reflects the existing successful arrangements which are in place for the implementation of the ongoing Rural Access Project (ARAP) which is also being implemented by MPW. Until August 31, 2016 the IP services will be provided under an ongoing contract between MPW and UNOPS. The process for selecting and hiring IP consultant services for the period after August 2016 will start after the successful Negotiation of the Grant Agreement.

6. *Selection of Implementation Consultant.* The Implementation Consultant will be recruited through a competitive selection process open to international consultants to ensure that a well-qualified consulting firm is hired. However, given the serious security issues in Afghanistan and the fact that the project activities are located in areas with particular security issues (de-facto control of some areas by Taliban and other insurgent forces), there is a risk that well qualified international consulting firms may be unable or unwilling to mobilize. A key issue for the consulting firms is the difficulty to obtain insurance for its staff mobilized in Afghanistan, and the willingness of qualified and experienced staff to move to Afghanistan. This situation makes it challenging to successfully mobilize international consulting firms to provide the needed specialized services to fill the skill gaps within MPW. If a qualified consulting firm cannot be recruited by MPW, possible alternatives would be to hire several individual consultants or to retain again UNOPS (United National Office for Project Services) which has a long track record as a reliable organization to provide project implementation services. UNOPS has been working for MPW during the past ten years and MPW is satisfied with its performance, and with the positive working relationships that have been established.

7. *Role of Implementation Consultant*. The role of the Implementation Consultant (IC) will be to provide supporting services as follows:

- assisting MPW PMT on overall project management and technical issues which initially cannot be handled by MPW with their own staff;
- assisting MPW to set up and maintain a Quality Assurance and Control system;
- help MPW to coordinate with the construction site supervision engineers and to resolve technical and engineering issues;

- support MPW staff in carrying out procurement and contract management, including reviewing tender documents and terms of reference, ensuring that procurement processes advance according to the procurement plan, preparing Bid Evaluation Reports, advising on how to deal with claims and contract management etc.;
- actively follow up on disbursement to make sure that payments are made on time and in line with established control mechanisms;
- advising MPW on any other project implementation issues such as safeguards, monitoring, reporting, etc.;
- providing continuous on-the-job and also classroom training for MPW and PMT staff on all of the above aspects, in line with a *Transition plan* which is described below.

8. *Transition Plan for handing over implementation activities from the Implementation Consultant to MPW.* The project will support the agenda of the Afghan Government for *nationalizing service delivery* and putting project implementation under the responsibility of local institutions. Given the weaknesses of MPW and its inability to handle project implementation alone at the present time, a *Transition Plan* has been prepared and is to be implemented under the THiRC project. The *Transition Plan* lays out the principles to be applied during the transition period as well as clear criteria for the phasing out of the IC. At the beginning of project implementation, the role of Implementation Consultant will still be relatively large, but will gradually decrease as MPW's capacity increases. After the transition plan is implemented successfully, it is expected that MPW civil servants and locally contracted staff will be able to handle all project management and implementation tasks without help from the Implementation Consultant (IC).

Transition Plan

9. *Transition plan for MPW to fully take over project implementation*. To support the Afghan Government agenda of *nationalizing service delivery*, the project is designed to have following transitional arrangements:

- Project implementation will be done first and foremost by utilizing any existing capacity of MPW civil servants and local individual consultants. An Implementation Consultant (IC) will be used during a transition period for well-defined critical support and training activities which are to be described in detail in the terms of reference for its assignment.
- From the start, MPW staff will handle through its own systems and with its own staff all processes related to all contracts, with the IC providing active advice and proactive support to the MPW staff.
- It is expected that after the transition period the MPW PMT will have acquired the needed capacity to efficiently and effectively carry out all project implementation tasks and that the support and training provided by the IC can be ended completely.
- The length of the transition period will depend on the speed with which MPW acquires the needed capacity. It could be shorter or longer depending on the actual performance of MPW staff and local consultants, measured by applying the indicators established (see further below) and also through the Bank's periodic capacity assessments which are to be carried out every six months. The support from the IC can be gradually phased out as MPW's own capacity in different areas is demonstrated. At the end of the transition period,

all project activities will be managed and handled by MPW PMT staff alone, without the support of the IC.

- The daily implementation activities of the project will be used to provide continuous on-the-job training by the staff of the IC for existing MPW civil servant staff and domestic consultants so that they can gradually take on tasks of an increasing complexity. Classroom training will also be provided by the IC.
- MPW leadership will monitor on a continuous basis the functioning and performance of MPW's own systems. It will make any necessary adjustments and reforms in its systems in order to reach acceptable performance levels. Addressing this issue may be crucial for MPW to achieve good performance levels.
- MPW will ensure that it can provide and retain staff for the PMT with the necessary basic qualifications and language skills in order to be able to absorb the training provided by the IC and others[9].
- Financial management and disbursement for contracts will be handled through the national system which is presently being improved with World Bank support. The IC will support the MPW PMT staff in carrying out these functions and provide training. Relevant performance indicators will be monitored and compared with target indicators, especially those related to the timely payment of invoices from contractors, consultants and suppliers.
- Measurable performance indicators (described further below) will be applied, covering different areas of project implementation activities.
- The World Bank will carry out semi-annual performance assessments of MPW/Government systems and staff to diagnose remaining shortcomings and skill gaps. It will examine MPW system reliability and performance indicators and issue a report on the assessments. The results of these semi-annual assessments, along with the performance indicators, will determine the pace of phasing out the support provided by the IC.

10. *Performance indicators for MPW project implementation activities.* The seven indicators shown below were identified based on the capacity assessments and will be applied for measuring MPW's project implementation capacity and performance.

- *Disbursement indicator:* Eligible payments to contractors, consultants and suppliers made are within the periods stipulated in the respective contracts.
- *Procurement indicator – Civil Works and Goods:* Time period between receipt of bids and finalization of bid evaluation report does not exceed two months.
- *Procurement indicator – Consultant Services:* Time period between receipt of consultant proposals and finalization of combined evaluation report does not exceed three months.
- *Procurement indicator – Filing System:* MPW maintains an orderly procurement filing system and complete files for each procurement process.
- *Accounting indicator – IFR's:* MPW will submit quarterly IFRs on time and in adequate quality.

[9] The remuneration levels of civil servants in Afghanistan make it difficult for MPW to either hire staff that is already well-qualified, or to retain staff that has acquired good qualifications while working at the Ministry. This issue is being addressed by the World Bank supported "Capacity Building for Results (CBR) Facility for Afghanistan" which assists the government in improving the capacity and performance of select line ministries (including MPW) in carrying out their mandates and delivering services to the Afghan people. The CBR facility includes a topping-up mechanisms for Civil Servant salaries.

- *Accounting indicator – accounting and filing system:* MPW will maintain adequate books of records and supporting documents of project transactions.
- *Auditing indicator – addressing issues:* MPW will resolve in a timely fashion any FM issues raised during Bank supervision, internal audit, external audit and other reviews.

Compliance with these indicators, and positive results of the regular performance assessments carried out by the Bank team every six months would warrant the gradual phasing out of the IC support services.

Technical / Engineering implementation arrangements

11. Traditional FIDIC-type civil works contracts will be used which involve three parties, namely the *Employer* (or client), the *Engineer* and the *Contractor*. The MPW PMT team will play the role of the *Employer*. MPW's provincial Directorate of Public Works (DPW) from the project provinces are the *Employer's representatives* at the sites and will deal with local issues such as representing MPW as grievance redress focal points and to coordinate with local communities, provincial governments etc. The *Engineer* role in this project will mainly include the function of site supervision, and will be performed by local consulting firms who are competent enough to deal with road earthworks, normal bridges and culverts. International specialists will however be needed to fill the skill gaps of more sophisticated works components, e.g. rehabilitation of the Salang tunnel and snow galleries, and asphalt concrete and concrete pavements. These will be provided and mobilized through the Implementation Consultant who will support the local site supervision consultants as needed. This overall approach will enable the country to build up its capacity by utilizing already acquired capacity from previous projects and by benefitting from specialized technical support provided through the Implementation Consultant. The extensive use of Afghan nationals for within the supervision consultant firms and also within the MPW PMT will make it possible to ensure adequate project implementation monitoring and reporting despite the security problems in Afghanistan.

12. It is to be noted that MPW has a well-functioning project implementation office for the IDA-funded Afghanistan Rural Access Project (ARAP). That PIO team has good technical and engineering capacity. Several members of the ARAP PIO will also work in parallel for the THiRC PMT and take on technical functions for the THiRC Project, including on-site monitoring and reporting.

Financial Management, Disbursement, Procurement and Contract Management
Integrated Fiduciary Assessment for Project Preparation

13. *Background.* The World Bank has gained substantial experience and understanding of the financial management environment in Afghanistan through the large number of projects under implementation over the past years. The Public Financial Management Reform Project II is the primary instrument to continue and enhance the fiduciary measures put in place during the past years to help ensure transparency and accountability for the funding provided by the Bank and other donors.

14. A PFM performance rating system using 28 high-level indicators was developed by the Public Expenditure and Financial Accountability (PEFA) multi-agency partnership program. It was first

applied in Afghanistan in June 2005 and updated in 2008 and 2013. Afghanistan's ratings against the PFM performance indicators generally portray a public sector where financial resources are, by and large, being used for their intended purposes. This has been accomplished with very high levels of support from international firms; this assistance will continue to be needed over the medium term if these ratings are to be maintained.

15. The World Bank is financing a Financial Management Advisor to assist the Ministry of Finance, an Audit Advisor to assist the Supreme Audit Office, and a Procurement Advisor to assist in Procurement-related activities. An Internal Audit function is also being developed within the Ministry of Finance with World Bank financing. The activities carried out under the series of Public Financial Management Reform projects have helped the Government to ensure that appropriate fiduciary standards are maintained for public expenditures, including those supported by the Bank and the donor community.

Joint Fiduciary Aspects (FM and Procurement)

16. *Fiduciary Capacity.* The fiduciary capacity assessment revealed that both FM and procurement capacity in MPW is extremely weak, and needs to be supplemented with technical assistance. The overall responsibility for project financial management will rest with the PMT. The PMT will be supported by (i) one international FM consultant with adequate experience and (ii) two national FM consultant staff (mid-level positions) with relevant experience working on donor funded projects and also on government systems. These positions will be hired initially through UNOPS and thereafter through the IC. In the event MPW is unable to hire a firm for the IC services, these positions will be filled with individual consultants. The TORs for these positions will be reviewed by the Bank. The national consultants will be embedded within the MPW finance department and work closely with the civil servants to train them to carry out the work efficiently. After effective transition, the international position will be phased out.

17. *Planning and budgeting.* Annual budgets will be prepared in line with MoF regulations and according to the Afghanistan fiscal year. The project budget will be prepared on the basis of the procurement plan and the work plan. The annual approved budget will be broken down by quarters for effective monitoring. The quarterly interim financial reports will compare actual expenditures to budgeted expenditures, and explain significant variances. This will help the PMT to adjust their budgets as necessary at periodic intervals of time. A system to track all financial commitments shall be established to be able to monitor the total commitments against available grant funds at any given point in time, and to ensure that all entered commitments are within the available funding.

18. *Internal control (including internal audit).* The internal control mechanism at the central and implementing agency level is good. There is proper segregation of duties. ARAP has an approved FM manual, this manual will be updated as necessary to reflect any specifics relating to this project and to be used as a generic MPW FM manual, which is also to be used for the THiRC project. Records of project transactions and copies of supporting documents will be maintained at MPW, while original supporting documents will be submitted to MoF. Periodic reconciliation of the designated account with the bank statements and MoF AFMIS records will be carried out.

19. Internal audit will be carried out by the Internal Audit department of MoF, similar to the arrangement for other Bank projects. This capacity of this unit has been and continuously to be strengthened through the series of PFM projects.

20. A fixed assets register will be maintained by MPW for assets purchased from project funds. Assets will be coded and a system of physical inventory will be established.

21. *Contract management.* The PMT will set up a robust contract management system to ensure tracking of payments against commitments at any given point in time. This will include a contract management team for effective monitoring of contracts and deploying timely remedies to contract management issues.

Governance and Oversight Arrangements

22. *Audit Arrangements - External Audit of Project Financial Statements.* The Supreme Audit Office with support from the Audit Agent carries out the annual financial audit for all World Bank funded/ administered projects. It will also be responsible for the audits for this project. The audits will cover all project transactions. Annual audited project financial statements will be submitted within six months of the close of the Afghan fiscal year[10]. The financial statements for the project audit will be prepared by MoF based on AFMIS records. There are common Terms of Reference for the audit of all projects which are reviewed and updated by the Bank on a yearly basis.

23. It is to be noted that the project also includes regular *technical audits* which will also cover procurement and contract management. The project will also put in place a procurement complaint handling system.

24. A *Grievance Redress Mechanism (GRM)* has been developed by MPW to address the project-related concerns of affected persons and the general public. This system will be put in place immediately after the project is approved by the WB Board of Executive Directors. In the meantime, an intermediate system of GRM has been put in place. Grievance redress committees have been constituted in area of the first segment of the B2B road, along with the Grievance Redress Committees at project level and MPW HQ level. The GRM will also allow to deal with potential complaints by contractors, consultants and suppliers concerning payment delays and other matters

FM considerations in the fiduciary assessment

25. *Flow of funds.* Project funds will be channeled through a segregated Designated Account in US$ to be opened at the Da Afghanistan Bank (DAB, Central Bank). The DA will be maintained and controlled by the MoF. However the PMT will be responsible to manage the DA and carry out periodic reconciliation. Advances will be made to the DA with a fixed ceiling calculated based on the estimated 4-months' of expenditures to be paid out of the DA. Disbursements from the Grant will be made using advances, reimbursements, direct payments and Special Committments. The project will follow traditional transaction-based disbursement arrangements. Further details of disbursement arrangements for the project, including supporting document requirements (such as summary sheet

[10] Current fiscal year is 1394 and covers the period Dec 21, 2014 to Dec 20, 2015.

or statement of expenditures), are described in the Disbursement Letter. All payments will be made centrally in Kabul, and no project funds are expected to flow to the provinces.

26. All payments from the DA will be made through check or bank transfer. Requests for payments from DA funds will be made to the SDU (Special Disbursement Unit in Treasury department of MoF) by MPW. In addition to payments from DA funds, MPW can also request the SDU to make direct payments from the grant. All withdrawal applications to the Bank, including advances, reimbursement and direct payment applications, will be prepared by MPW and submitted to the Bank by MoF. Designated account replenishment applications will be submitted preferably on a monthly basis, and at least on a quarterly basis to ensure sufficient liquidity. The project costs (with the exception of RAP implementation costs) will be fully financed by the IDA grant as per the table below, inclusive of taxes, covering goods, works, non-consulting services, consulting services, training and workshop, and incremental operating costs.

Table: IDA Financing by Category of Expenditure (US$)

Category	Amount of the Financing Allocated (expressed in US$)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, non-consulting services, consultants' services, Training and Incremental Operating Costs for the Project	20,300,000	100%
(2) Works under Part 1 of the Project[11]	224,700,000	100%
(3) Refund of Preparation Advance	5,000,000	Amount payable pursuant to Section 2.07 of the General Conditions
TOTAL AMOUNT	250,000,000	

27. Further advances from the designated account up to a maximum of US$15,000 may be withdrawn and maintained by MPW. The actual amount of funds to be maintained as imprest, if needed, will be based on project needs and will be reviewed by the Bank. Such imprest funds will be subject to adequate petty cash management procedures (for custody, control, limits, physical cash verification and replenishment) as already agreed with MPW under the ARAP. The custodian of the imprest cash will be the bonded cashier of MPW.

28. *Disbursements.* The World Bank carried out a broader Public Finance Management (PFM) review in 2013 and a specific a FM capacity assessment for MPW in 2015. It was found that the

[11] As indicated in the Financing Agreement "no withdrawal shall be made under Category (2) until and unless the Association has received satisfactory evidence that enough budget to adequately cover full compensations due to displaced persons under the resettlement action plan (RAP) for the first segment of the B2B road, dated May 20, 2015 has been made readily available by the Government of Afghanistan in a manner satisfactory to the Association."

Government's and MPWs FM system have challenges in making payments in a timely manner. Processing a payment application for a construction invoice sometimes takes up to 3 and 6 months which is not acceptable, and outside the contractually agreed time periods for making payments. Payments for consultant contracts are quicker, but still not within acceptable time frames. This is due to procedural bottlenecks in the processes within MPW and MoF that will pose to a challenge to timely project payments. The Bank is currently engaged in a dialogue with MoF to address the bottlenecks in MoF and agree on measures to streamline the processes for efficient payment processing. It is expected that some simplifications will be agreed for implementation beginning FY1395. The processing timeline within MPW will also be reduced through removal of non-value added steps and delegation of authority for payments.

29. *Accounting and Financial Reporting.* All accounting is centralized in AFMIS in MoF. Subsidiary books of project records such as bank book, cash book, contract register, asset register, etc. will be maintained by MPW using a simple off-the-shelf accounting software. Cash basis of accounting will be followed.

30. Quarterly Interim Financial Reports (IFRs) will be required for the project. These reports will be submitted by MPW in form and substance agreed with the Bank. The reports will be submitted within 45 days from the end of the quarter following government fiscal year. The IFRs will include Statement of Cash Receipts and Payments, Statement of Uses of Funds by Project Activity, bank and advances reconciliation, and the bank statements.

31. *Monitoring of fiduciary performance and implementation support plan.* While MPW has significant experience working on Bank funded/administered projects, the main weakness is the limited FM capacity. The capacity of MPW will be supplemented by the hiring of one professionally qualified international FM consultant for an initial period of one year, and two national FM consultants (mid-level position) with relevant experience. The international consultant will provide technical guidance and oversight.

32. The fiduciary performance will be assessed through the following indicators: (i) Timely and quality submission of quarterly IFRs; (ii) maintenance of adequate books of records and supporting documents of project transactions; (iii) Timely submission of audited financial statements; (iv) timely resolution of FM issues raised during Bank supervision, internal audit, external audit and any other reviews, and (v) timely processing of payment of invoices.

33. The Bank will carry out two FM reviews annually, of which one will be a detailed field review and will include a transaction review of project expenditures on a sample basis. The implementation support will include monitoring of fiduciary performance based on identified indicators, review of IFRs and audit reports, review compliance with legal covenants, review progress on agreed actions and review of FM risks.

Procurement

34. Procurement of Goods and Non-Consulting Services shall be carried out in accordance with the World Bank "Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published by the World Bank in January 2011 (Revised July 2014). For the selection of consultants, the World Bank "Guidelines:

Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published by the World Bank in January 2011 (Revised July 2014) shall be applied. Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006 and updated January 2011, shall apply to the Project.

35. The overall responsibility for procurement and contract management under the project will be with the staff of the Project Management Team (PMT) which has been set up within MPW. PMT staff will act as the World Bank's main interlocutors for all procurement aspects of the project. The PMT will also be responsible for contract management. Training on procurement and contract management will be provided to the Staff of the PMT and designated officials of MPW. MPW's own staff of civil servants will receive support through Implementation Consultant services to be retained under the project, with dual responsibilities – support for functional tasks and transfer of knowledge and capacity building to MPW civil servant staff. To this end, staff of the Implementation Consultant will be embedded within the MPW procurement department to work alongside with the civil servants.

36. As part of project preparation, World Bank staff held detailed discussions on procurement issues with MPW staff and management. This helped to understand the strength and weaknesses of MPW in the area of procurement. It was found that MPW civil servants generally have low levels of motivation due to the low remunerations and insufficient training. There is much need for capacity building which must however be combined with the creation of financial incentives (salary or other types of compensation) in order to be effective and to ensure that trained civil servants remain in the Ministry. As described elsewhere in this document, the capacity building is to be carried out through the Implementation Consultant and as part of the Transition Plan. It has to start by covering the Procurement Act, rules and regulations, and standard bidding documents. A solid knowledge of procurement and contract management principles, and the use of professional judgment needs to be developed among the civil servant staff. The procurement complaint handling system at MPW is not developed and needs to be established. Market assessment and realistic contract packaging is another area which needs to covered. Recordkeeping and safe keeping of bids (especially the financial proposals in consulting services contracts) is another area to be improved during project preparation and implementation. A manual for procurement exists (for the ARAP) but needs to be updated and expanded to cover contract management. Dispute resolution is another area for which capacity is now very limited and there are pending cases which have remain unresolved for a long time. Ad-hoc decision making and lack of delegation of power presently reduces the efficiency in project delivery and needs to be addressed.

37. The Bank team carried out the procurement capacity assessment of MPW. It concluded that that MPW has qualified procurement staff with experience in National Competitive Bidding and Shopping procedures. Very few MPW staff have been previously exposed to procurement procedures of international financial institutions such as the World Bank. Given the nature of this Project which requires Selection of Consultants and issuance of International Competitive Bidding for procurement of large contracts for civil works, the involvement of the Implementation Consultant will be necessary at least during the initial years of project implementation. The World Bank's Procurement Prior Review thresholds were set based on the basis of existing procurement capacity and procurement risks.

38. During the past 15 years, MPW has been implementing externally funded projects with intensive support from consultants. The project implementation capacity of MPW has not been adequately built over this period. There is a high project implementation risk due to the low in-house capacity. It is noted that Transparency International has rated the corruption risk as high.

39. As described elsewhere, MPW will hire Implementation Consultant services to supporting MPW in project implementation, including for procurement and contract management. The procurement project risk rating is *high,* even when assuming that the IC will remain in place during the transition period which is expected to last through the first three years of the project implementation period.

40. The overall procurement arrangements to be applied under the project are summarized in the table below.

Summary of Procurement Arrangements

Expenditure category	***Contract value threshold (US$)***	***Procurement method***	***Contracts subject to prior review***
Works	>5 million	ICB	All contracts
	100,000 ≥ ≤ 5 million	NCB	First contract
	≤ 100,000	Shopping	N/A
Goods and non-consulting services	>200,000	ICB	First contract and all contracts above US$ 0.5 million
	200,000≥ ≤ 50,000	NCB	First contract
	≤ 50,000	Shopping	N/A
Consulting (firms)	>200,000	QCBS/FBS/ CQS*/LCS/SSS	All contracts
	≤ 200,000	QCBS/FBS/ CQS/LCS/SSS	All single source contracts above US$ 50,000; and first contract for each selection method.
Consulting (individuals)		Section V in the Guidelines	All cases above US$ 100,000 and all single-source contracts above US$ 50,000.
Direct contracting			All cases above US$ 50,000

Note: * indicates that Under CQS method of selection of consultant, the contract size will not exceed US$ 300,000, unless specifically agreed in procurement plan.

41. The initial Procurement Plan for the project was prepared by MPW. It was reviewed by the Bank team and found to be acceptable. This Procurement plan will be updated at least annually, or as needed to reflect the latest project requirements. An overall outline of the expected main contracts to be procured under the project is presented below. It is to be noted that the initial procurement plan takes into account the limitation in funding based on the planned IDA grant of US$ 250 million. As explained elsewhere, the contracts shown below for the Salang Pass represent the most critical repairs, but may not be sufficient to cover the full repair and rehabilitation works needed, especially for the full length of the pavement and the snow galleries.

Summary Table of major contracts to be procured under the project for works and consultancy services*

Works

1	2	3	4	5	6	7
Ref. No.	**Description**	**Estimated Cost (U$S million)**	**Procurement Method**	**Domestic Preference (Yes/No)**	**Review by Bank (Prior/Post)**	**Expected date for Invitation for bidding**
1	B2B road - Segment 1 (28.2 km)	39.4	ICB	Yes	Prior	Oct. 2015
2	B2B road - Segment 2 (37.2 km)	24.2	ICB	Yes	Prior	Feb. 2016
3	B2B road – Segment 3 (19.8 km)	24.0	ICB	Yes	Prior	March 2016
4	B2B road - Segment 4 (20.8 km)	23.1	ICB	Yes	Prior	April 2016
5	B2B road - Segment 5 (21.5 km)	22.4	ICB	Yes	Prior	Feb. 2016
6	B2B road - Segment 6 (23.7 km)	26.3	ICB	Yes	Prior	Feb. 2016
7	Salang Tunnel Repairs (incl. pavement in tunnel, 3 km)	9.0	ICB	No	Prior	Dec. 2017
8	Salang road – Concrete Pavement Reconstruction – North Side (12 km)	15.0	ICB	Yes	Prior	Dec. 2017
9	Salang road – Concrete Pavement Reconstruction – South Side (15 km)	18.8	ICB	Yes	Prior	Dec. 2017
10	Salang Pass – Snow gallery repairs (partial repairs)	7.0	ICB	Yes	Prior	Dec. 2017
11	Salang Pass – Asphalt pavement rehabilitation	10.0	ICB	Yes	Prior	Feb. 2016
	TOTAL	222.1				

* Note: The contract packaging may undergo change to reflect the market reality as outcome of the procurement strategy for sustainable development being undertaken by MPW.

Consulting Services

1	2	3	4	5	6
Ref. No.	**Description of Assignment**	**Estimated cost US$**	**Selection Method**	**Review by Bank (Prior/Post)**	**Expected RFP date**
1	Construction supervision for B2B road.	14,000,000	QCBS	Prior	Oct. 2015
2	Construction supervision for Salang Pass.	4,000,000	QBCS	Prior	May 2016
3	Specialized Tunnel design and engineering services including	1,500,000	QBCS	Prior	March 2016

	supervision of works in Salang tunnel.				
4	Technical Audits of Civil Works	2,000,000	QBCS	Prior	Dec. 2015
5	Definition of sustainable Asset Management arrangement for B2B and Salang roads.	800,000	QBCS	Prior	Nov. 2016
6	Design and Implementation of MPW Communication and Community Engagement Strategy during project period	1,200,000	QBCS	Prior	Nov. 2016
7	Implementation Consultant	4,000,000	QBCS	Prior	Nov. 2015
	Total	27,500,000			

42. *Shortlist comprising entirely of National Consultants.* Short list of consultants for services estimated to cost less than US$ 100,000 equivalent per contract may comprise entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

43. *Frequency of procurement reviews.* The capacity assessment of the Implementing Agency has recommended three procurement implementation support missions annually in the initial years until capacity improves, followed by two missions annually, including procurement post reviews.

44. *Road construction industry assessment.* An assessment by MPW of contractors and consultants (local and foreign) active in the construction of road infrastructure in Afghanistan is in progress. The result of this assessment will help the Afghan government to design the most appropriate procurement strategy for the road sector. During the discussions it was agreed that MPW will extend this assessment by applying the qualification criteria normally applied under World Bank procurement guidelines.

Environmental and Social (including safeguards)

45. The MPW PMT has established an Environmental and Social Safeguard Management Unit (ESMU) which has overall responsibility for coordinating, implementing and compliance monitoring of the Environmental and Social safeguards commitments and requirements of the Project. The ESMU so far has one qualified and experienced environmental specialist who participated in the mission. A social safeguards specialist will be hired as soon as possible. MPW will also delegate some of its civil service staff to the ESMU so that they work alongside the two experienced specialists and acquire the necessary skills and capacity for such positions. At least one of the staff of the ESMU shall be female to facilitate the consultations and interactions with female project-affected persons. The ESMU will place some of its staff to at the regional office of MPW closest to the site of civil works under the project.

46. Environmental and social management at contractor's side. The civil works contracts will stipulate that each contractor will have a full-time Environmental and Social Safeguard Officer on the site who will be responsible for all environmental and social safeguard issues and implementation of the respective site specific ESMP's.

47. RAP implementation. MPW has allocated budget resources to cover compensation payments to the affected families within the first segments of the B2B road. This budget still needs to be approved by the Council of Ministers. MPW will soon initiate to draft a request to the Council of Ministers for budget approval, including the budget for livelihood restoration (i.e. affected businesses within the right-of-way of the road) which have been outlined in the RAP for the first segment. Compensation payments to the affected families will be made through a government commission to be assigned by the Council of Ministers. MPW will also seek cabinet approval for establishing that commission. The B2B road works will also have impacts on public properties (e.g cemetery, irrigation facilities, etc.) and MPW may contract with local communities to conduct clearance and/or relocation of such community assets, or similar actions needed to resolve local community issues.

48. Third party monitoring of RAP implementation. MPW confirmed that it will use the services of a third party monitoring agent to conduct monitoring of RAP implementation after such implementation is essentially completed.

49. A Grievance Redress Mechanism has been developed by MPW to address the project-related concerns of affected persons and the general public. This system will be put in place immediately after the project is approved by the WB Board of Executive Directors. In the meantime, an intermediate system of GRM has been put in place. Grievance redress committees are to be constituted at various levels:

- at the *Road Segment level*, composed of relevant local Community Development Committee (CDC) members, representatives of Project-Affected Persons (PAFs), representative of the road contractor and of MPW PMT staff;
- at the *Project level*, composed of MPW PMT staff, Arazi, a representative of the Ministry of Justice, District/Provincial Governors, Provincial Director of MPW, Safeguards officer from ESMU/PMT, AKDN (NSP Facilitating Partner) and Community Representatives;
- at the *MPW Headquarter* level, composed of the MPW Deputy Minister, MPW PMT Director and the PMT's social team.

Monitoring & Evaluation

50. MPW will be responsible for the monitoring of results of the Trans-Hindukush Road Connectivity Project. As is the usual practice under externally funded projects, regular monitoring reports will be prepared by staff of the PMT, both for the World Bank but also for other government agencies such as the Ministry of Finance. During the regular implementation review visits, staff from the World Bank and MPW will continue working together for joint results monitoring. The cost of the PMT is fully covered by the IDA Grant.

Integrated Fiduciary Assessment Table
Trans-Hindukush Road Connectivity Project
Project Preparation (IFAP), Project and Entity

Fiduciary Element	**Responsibility FM, PR or Joint**	**Risk Rating**	**Comments & Risk Mitigation**	**Residual Risk Rating**	**Key Performance Indicator** (to be established by the Fiduciary Team)
1. Joint Fiduciary Aspects					
1.1 Fiduciary Capacity (PRAMS RF4 & FME 7)[12]	**Joint**	High	• The PMT will develop and publish a code of ethics to be followed by project management team (by January 2016). • The PMT will setup the **procurement and contracts management team** (PCMC) of 9 members. 3 civil servants in leadership roles and 3 consultants (by November 2015). • Annual training calendar for procurement and contracts management will be developed. This will be updated in July every year. All PCMC staff and procurement decision makers and the evaluation committee members to attend the two weeks training in procurement by June 2016.	Substantial	• Code of ethics is published • PCMC is set-up with agreed manpower • Training calendar is prepared and all the PCMC members, procurement decision makers have received training
1.1.1 Is there adequate fiduciary staff based on the profile of the project, in terms of numbers and experience, to implement the project, with clear definition and segregation	Joint	High	No. PCMC will be set-up and manpower deployed as proposed above (by November 2015) The FM capacity in MPW is extremely weak. FM consultants (one international and 2	Substantial	PCMC is set-up and manpower deployed Consultants are hired as per agreement

[12] References are to the 11 PRAMS Risk Factors and the 7 FM Elements, See Attachments 3 and 4

Fiduciary Element	Responsibility FM, PR or Joint	Risk Rating	Comments & Risk Mitigation	Residual Risk Rating	Key Performance Indicator (to be established by the Fiduciary Team)
of functions between PR and FM?			national positions) will be engaged in late 2015 under the project, through UNOPS and thereafter through the IC or as individual consultants. The national consultants will closely work with the civil servants, and their TORs will include a capacity building element.		
1.2 Planning and Budgeting (PRAMS RF5 & FME 1)	**Joint**				
1.2.1 Are realistic budgets and procurement plans prepared and reconciled?		Substantial	Require periodic reviews to identify/remove the cause of the variances between planned and actual and agree on recommendation to avoid occurrence into the procurement and delivery schedule - intensify supervision Annual budgets will be prepared based on procurement plan and work plan. The quarterly financial reports will include comparison of actual expenditures to budgets, and provide explanation thereof and should lead to budget revision as necessary.	Moderate	50 % contracts awarded within original plan. Periodic review of the procurement plan in year 1 to suggest corrective measures to ensure timely procurement Variances are reported in the financial reports and explained. MPW should take advantage of the MoF budget review process during the year to revise the budget upwards or downwards
1.3 Internal Control (including Internal	**Joint**				

Fiduciary Element	Responsibility FM, PR or Joint	Risk Rating	Comments & Risk Mitigation	Residual Risk Rating	Key Performance Indicator (to be established by the Fiduciary Team)
Audit)(PRAMS RF 1,2 &3; FME 3)					
1.3.1 Are effective internal controls in place, as jointly assessed by financial management and procurement staff? These include internal audit, clearly defined accountability, quality control processes, and availability of complete records of the procurement and financial management processes.		High	Ensure the procurement and contracts management decision making is fully covered in the Manual of the Agency and is available/known to staff An FM manual exists for ARAP that will be utilized for THiRC. Payments follow the centralized arrangements, and controls in the Line Ministries (LM) and MoF over these payments are fairly robust. LMs are mandated to submit original copies of payment documents to MoF, and retain copies. Internal Audit will be carried out by the Internal Audit department of MoF.	Substantial	Complete manual is to be ready in November 2015 FM manual is disseminated to the FM staff engaged on the project. Audits and other reviews do not reveal anomalies in project payments Internal Audit reports are submitted preferably bi-annually, and atleast annually. Monthly reconciliation of the project DA is carried out and any unidentified transactions are resolved timely.
1.4 Contract Management (PRAMS RF10, FME 2 & 3)	**Joint**	High	Establish Contracts management system (by November 2015)	Substantial	Contracts management manual is ready for use
1.5. Project Management and Governance:	**Joint**				

Fiduciary Element	Responsibility FM, PR or Joint	Risk Rating	Comments & Risk Mitigation	Residual Risk Rating	Key Performance Indicator (to be established by the Fiduciary Team)
1.5.1 Audit Arrangements:	**Joint**				
1.5.1.1 External Audit of Project Financial Statements (PRAMS RF 11, FME 6)	**Joint**	High	Require audit by independent private auditors Annual project audit will be carried out by the Supreme Audit Office with support from an Audit Agent, similar to the arrangement for other projects. There is occasional possibility of delays due to delay in contracting of the Audit Agent and/ or mobilization of audit team.	Substantial	Combined Fiduciary, Technical and Contracts management audit. Submission of acceptable audit report within 6 months from the year end.
1.5.1.2 Technical Audits (PRAMS RF 11, FME 6)	**Joint**	High	Include appropriate coverage of procurement aspects to meet project requirements in the audit TOR. Need to distinguish between compliance and performance audits so that auditors know what to do - provide appropriate guidance.	Substantial	Combined audit F, T & CM.
1.5.2 Mitigating Fraud and Corruption – Transparency, Accountability and Participation (PRAMS RF 7 & 11, FME 6)	**Joint**	High	In the project manual, establish arrangements for safe-keeping of bids/proposals.		The PMT would propose and establish a credible system for safeguarding the bids with adequate checks and balances.
1.5.3 Grievance Redress Mechanisms – complaints handling (PRAMS RF 9) and grievance redress (PRAMS RF 11, FME 6)	**Joint**	High	Establish/improve and implement complaint management system (immediately after Board Approval)	Moderate	PMT will develop a credible procurement complaints handling system and mechanism. Will adequately display on the notice boards and on their website. The efforts will be

Fiduciary Element	Responsibility FM, PR or Joint	Risk Rating	Comments & Risk Mitigation	Residual Risk Rating	Key Performance Indicator (to be established by the Fiduciary Team)
					made to develop an online, SMS linked complaint handling system. The PMT will include the relevant contacts in procurement plan.
2. Procurement Processes and Procedures (PRAMS RF 6,7 &8)	**PR**	High	Agency to increase due diligence of winning bidder prior to awarding. Bank staff use online Fraud and Corruption Red Flag Tool and/or discuss with RPM/INT.	Substantial	The agency to conduct due diligence including the online check for Debarred/cross debarred list and temporary suspension through internet and Client Connection.
3. FM Considerations					
3.1 Funds Flow (FME 4)	**FM**	High	Annual budget will have to be approved on time. However historically there has been delay in approval of annual budgets, there is a procedure to obtain carry forward budget while the new budget is awaited Project funds will flow through the single designated account. However, there are inefficiencies in the processes that impact timely payments.	Substantial	MPW makes use of the carry forward budget to make project payments while awaiting the new budget. Bottlenecks are addressed in MoF and in MPW. Payments are made within the timeline stipulated in the contracts.

Fiduciary Element	Responsibility FM, PR or Joint	Risk Rating	Comments & Risk Mitigation	Residual Risk Rating	Key Performance Indicator (to be established by the Fiduciary Team)
			While direct payments is also an option, local currency direct payments take longer to make. Project should aim to make local currency payments only from the DA to avoid delays.		All local currency payments are made only from the DA.
3.2 Accounting and Financial Reporting (FME 2 & 5)	**FM**	Substantial	All accounting is centrally done in MoF using AFMIS. Subsidiary books of records will be maintained by MPW using a simple off-the-shelf accounting software. Acceptable financial reports should be submitted on a quarterly basis. This will be facilitated by MPW's books of records and the centralized accounting system.	Moderate	All accounting is done in AFMIS, and MPW maintains subsidiary books of records. The financial reports are submitted within 45 days from the end of the quarter, show accurately project receipts and payments, and balances are reconciled.
FM Risk rating	**FM**	High		Substantial	**H, S, M, L**
Procurement Risk rating	**PR**	High		Substantial	**H, S, M, L**
Overall Fiduciary Risk Rating	**Joint**	**High**		**Substantial**	**H, S, M, L**

ANNEX 4: ECONOMIC ANALYSIS

Afghanistan: Trans-Hindukush Road Connectivity Project

1. The two project roads, namely the Salang Highway (SH) and Baghlam – Banyam (B2B) road provide the only two viable roads across the Hindukush mountain range connecting the south and southheastern parts of Afghanistan with the north and northeastern parts. The Salang Highway (Jabar Seraj – Khinjan) is 86.0 km long and has a 3.0 km long tunnel at its highest point of 3,400 meters altitude. The B2B road is an alternative basic earth/gravel road, through the Shiber Pass, with a length of 151.2 km. Both roads are in a dilapidated state and subject to frequent closures during extreme weather. The average elevation of the B2B road is 1,500 m with the highest point at about 2,200 meters above sea level. For the Salang Pass, the average elevation is 2,700 meters with the highest point at 3,400 m above sea level. Both roads are winding and undulating through harsh terrain (Table 1).

Table 1. General Characteristics of the two Project Roads

Characteristics	**Salang Pass** (Jabar Seraj – Khinjan)	**Baghlan – Banyam (B2B)**
Project Length (km)	86.0 km	151.2 km
Type of road surface	Generally paved but dilapidated	Earth/Gravel in very poor condition
Average Elevation (m)	2700	1500
Average Curvature (deg/km)	280	202
Average Rise and Fall (m/km)	33.8	22.7
Average no. of Rise/Falls (per km)	2.4	2.2
Motorized Traffic Volumes (AADT in vpd) in 2014	4,459	512
Percentage of Trucks	26.7	10.5
Growth rates 2015/2020/2035 (% p.a.)	5/4/3	5/4/3
Generated/Induced Traffic (%)	15	30
Annual Cargo Throughput (tons)	5,603,480	201,115
Average no. of days closed per annum	81	30

2. The investment project evaluated consists of (i) upgrading the B2B road to a high standard asphalt road and (ii) resurface the Salang Pass along with repair and restoration of the tunnel and snow galleries. The economic evaluation was carried out using the HDM-4 model[13] which is the standard tool used by the World Bank. It allows computation of the life cycle costs associated with various alternative investment options (with and without project) by simulating the traffic flows over the road and modelling the effects of traffic loads and environmental factors on road deterioration, vehicle operating costs, Green House Gas (GHG) emissions, etc., under selected

[13] Highway Design and Management Model 4, version 2.02.

road maintenance regimes. For this purpose, the two project roads were divided into three sections each with varying geometric and soil characteristics.

3. The main costs associated with the project are the investment costs, and the routine and periodic maintenance costs associated with each alternative of "with" and "without project" investment. The "without project" alternative assumes that the B2B will continue as a gravel road in its present state with minimum maintenance during the evaluation period comprising routine maintenance, grading of the surface once a year and re-gravelling the surface to 200 mm thickness whenever the surface thickness is reduced to less than 50 mm. On the Salang Highway, the "without project" alternative assumes minimal road maintenance during the evaluation period comprising of routine maintenance, patching of all potholes and reconstruction of the surface when it reaches the nonfunctional roughness level of 16.0 IRI[14].

4. The financial cost assumed for upgrading the B2B road is US$ 170 million covering (i) the widening of the carriageway to 7.0 m from the existing variable width of around 6.0 m with shoulders varying between 1.0 and 1.5 m; (ii) establishing a granular sub-base of 250mm thickness, a crushed stone base of 200 mm and an asphalt wearing surface of 100 mm thickness.

5. The Salang Highway rehabilitation comprises largely of scarification and re-cycling of the existing pavement surface; rebuilding and compacting the existing base course and topping it with new pavement. A concrete pavement is to be built at the higher elevations, while asphalt concrete is to be used at the lower elevations. In addition, it involves the rehabilitation of the tunnel and the snow galleries, provision of ventilation and lighting, special drainage structures, strengthening the tunnel walls and ceiling, provision of a sub-station for power supply and construction of critical facilities for regular maintenance of the tunnel and snow galleries. The works do not include the provision of climbing lanes, or the widening of the existing two lane road to provide the capacity expansion needed for future traffic.

6. A social conversion factor (SCF) of 0.85 is used to convert financial costs of construction and maintenance to economic costs, and a SCF of 0.90 is used to convert other financial costs (mainly vehicle operation related) to economic costs to take into account existing distortions in market prices due to taxes, duties, subsidies, abundance of unskilled labor and scarcity of skilled labor and foreign exchange.

7. The most significant benefit of the project is the reduction in the number of days the two roads are likely to remain closed after upgrading and rehabilitation works, due to their better technical condition. After consultation with many specialists inside and outside Afghanistan, a conservative estimate of a 50% reduction in road closures that would result from the project has been used for the economic evaluation. The type of closures considered ae those occurring regularly today (without the project), namely due to natural and weather-related elements such as flooding, avalanches and landslides which will continue to occur even after the project is implemented, but to a lesser extent. From historical data, the average number of days that the B2B and Salang Highways are closed to traffic are taken respectively as 81 days and 30 days per annum. This is conservatively expected to be reduced by 50% respectively to 40.5 and 15 days a year after improving the two roads. This reduction would be due to the improved technical condition of the roads. Additional reductions can be achieved through better management of the roads, but these

[14] International Roughness Index

are not included in the economic evaluation. Similarly, it could be argued that once the two roads will be available after the project is completed, there will be very few days when both roads are closed simultaneously. However, the economic analysis maintains the conservative assumption of a 50% reduction of road closure days. The economic analysis does not consider the reduction in the (very real) risk of a partial collapse of the Salang Tunnel or the snow galleries, which would result in very long closures of the Salang Pass, simply because there is no reliable basis for any justifiable assumption on the probability of such an event occurring and the resulting length of road closure.

8. The benefits related to fewer days of road closure comprise: (i) reduction in inventory holding costs for road cargo; and (ii) reduction in the loss of revenue from passenger fares, as summarized in Table 2. The average market value of cargo carried by trucks across the Hindukush is estimated at US$ 2,308.2 per ton on the basis of the weighted average of the market prices of the imports and exports in Afghanistan. The value of such cargo in transit is taken as 60% of the market price (or US$ 1,385 per ton) to allow for value addition, packaging, overheads, etc., at the end of the supply chain. The cost to the economy due to road closure is calculated as the additional cost of holding the inventory, amounting to the sum of the cost of capital and the inventory handling cost, taken together as 17% of the value of the cargo, for the holding time period differential.

9. Similarly, with respect to passengers, the cost of road closures is taken as the loss in passenger fare revenue for the number of days that the roads are closed annually.

Table 2. Summary of the Cost of Road Closures

Item	Salang Pass	Baghlan – Banyam (B2B)
Avg. no. of days of road closure:		
(a) Without Project	30	81
(b) With Project (50%)	15	40.5
Avg. annual additional Inventory Holding Cost ($m):		
(a) Without Project	108.43	10.51
(b) With Project	54.22	5.25
Avg. annual Loss of Passenger Fare Revenue ($m):		
(a) Without Project	8.51	2.04
(b) With Project	4.26	1.02
Total benefits of reduction in road closures during project period of 18 years (US$ million)	**58.48**	**6.27**

10. Other quantifiable benefits include the reduction in vehicle operating costs and the reduction in annual road maintenance costs which are automatically computed by the HDM-4 model and added to the above benefits to calculate the overall net benefits discounted at the discount rate used (12% p.a.). Reductions (or increase as sometimes the case may be) in the number of accidents are also taken into account if accountable in monetary terms, but because of the lack of accident data in Afghanistan, this has not been included in the analysis.

Results of economic evaluation, and sensitivity analysis

11. On the basis of the above, the HDM-4 model was applied for both roads, simulating the traffic over a period of 18 years from 2015 to 2032 where the construction period (during which no benefits accrue) for the B2B highway is taken as three years and the Salang highway as two years. The discount rate used is 12% per annum, and a sensitivity analysis of the results was carried out with 20% increase in capital costs; 20% decrease in total benefits; and the combined incident of an increase in capital costs and simultaneous decrease in benefits of 20% each. The results are summarized in the table below.

Summary of Results of the Economic Evaluation

Alternative	Salang Pass		Baghlan – Banyam (B2B)		Combined Project	
	NPV ($m)	ERR (%)	NPV ($m)	ERR (%)	NPV($m)	ERR (%)
Base case (Rehabilitate and Upgrade)	493.4	73.8	26.7	15.2	520.1	44.5
20% increase in capital investment costs	480.0	63.6	6.0	12.6	486.0	37.9
20% decrease in project benefits	381.2	61.5	1.1	12.1	382.3	36.6
20% increase in costs AND 20% reduction in benefits	367.8	52.8	-19.6	9.9	348.2	31.2

12. As can be seem from the results shown in the above table, the B2B road as a stand-alone project would be economically viable even with the low volume of traffic. The Salang Pass rehabilitation is highly viable given the high traffic volumes and the impact of reducing road closures on inventory holding costs. Since the Salang Pass repair cannot be done without upgrading the B2B road, both roads must be considered and evaluated as one project. The overall combined ERR for both roads is 44.5% and the net present value is US$ 520.1 million at a 12% discount rate. Sensitivity analysis by varying capital costs and overall benefits show that the ERR is robust and varies between 38% and 31% when costs are increased or 20% and benefits reduced by 20%, or both.

GHG Emissions

13. Table 4 below shows the total Green House Gas (GHG) emissions (in tons) over the 18 year analysis period under the “with-project” and “without-project” scenarios. Overall, the project will cause an increase in the GHG emissions, which is largely because of the additional traffic that would be generated or induced as a result of improving the two roads. Because of the harsh terrain and little change in the alignment and geometry of the two roads, vehicle speeds and efficiency do not change very significantly under the two scenarios, especially on the Salang Highway which

already has a very high volume of traffic. On the B2B road traffic speeds will however increase more significantly due to better surface conditions.

14. The total carbon emission (CO_2) during the project period of 18 years is expected to be 2.54 million tons, amounting to approximately US$ 88 million in overall cost to society (undiscounted) over the analysis period[15]. The emissions in the with-project scenario are higher by about 244,000 tons as compared to the without-project scenario. The additional emissions in the with-project scenario were included as a project cost in the economic analysis.

Table 4. Summary of Green House Gas Emissions (tons)

	Hydrocarbon HC	Carbon monoxide CO	Nitrous Oxide NOx	Sulphur Dioxide SO2	Carbon dioxide CO2	Particulates Par	Lead Pb
Without Project							
B2B Highway	744	1,398	2,874	103	298,959	419	24
Salang Highway	7,812	8,664	28,358	1,320	2,002,029	4,928	70
Total	**8,556**	**10,062**	**31,232**	**1,423**	**2,300,988**	**5,348**	**94**
With Project							
B2B Highway	799	1,844	2,762	94	281,854	382	24
Salang Highway	8,840	9,918	32,073	1,490	2,262,924	5,569	80
Total	**9,639**	**11,763**	**34,835**	**1,584**	**2,544,779**	**5,951**	**103**
Net Change in Emissions	**+1,083**	**+1,701**	**+3,603**	**+161**	**+243,791**	**+603**	**+9**

Other project benefits (non-quantifiable)

15. *Rural Access.* The project area covers three different provinces and over 60 villages will have better access to markets when the project roads are improved. The project will directly affect a village population of about 500,000 (50% women) in ten districts. The improvement of the project roads would generate an array of benefits to the affected populations including: improved access to markets, reduction in travel times, reduction in vehicle operating costs, improved access to health and education facilities, and employment creation through the start-up and expansion of businesses that will likely result due to the economic stimulus provided by the improved roads.

16. *Security related benefits.* The B2B road in its present condition is virtually impassable during the winter months, and even during summer it is a very slow and arduous journey. The difficult access to the area along the B2B road favors the general lawlessness in that area makes it

[15] In line with World Bank guidance material for economic analysis of transport projects, the cost to society of carbon emissions has been estimated to increase from initially $30 per ton to $50 per ton over the period between 2015 and 2050, undiscounted.

difficult for the Government to bring better security. The provision of an asphalt concrete paved road will provide all-year access and is expected to increase security in the area. This, in turn, will most likely provide new opportunities for the local population and for businesses, including in agriculture and mining.

17. *Food Security.* The Salang Pass is critical for intra-country market connectivity, including for food value chains. A rehabilitated Salang Pass and an alternative B2B road link will lower road user costs in a way that will allow Afghan food producers to take better advantage of domestic markets and thus improve Afghanistan's food security. The lower fares and freight costs would change the economics of intra-regional trade and would allow agricultural producers and manufactures to enjoy greater economies of scale.

18. *Extractive Industries*. Both project roads are located within the so-called "Afghan Resource Corridor" which is to be developed in the future. It focuses on the mining sector. No doubt, for Afghanistan to realize the full potential of the estimated one trillion dollars of mineral wealth within the country, a rail network would have to be developed in the long run. However, in the short- and medium-term, roads are likely to serve as the key transport mode by which capital equipment will be brought in and mining products will be transported. While the Aynak copper mine will most likely use a road or rail link through Torkham, the use of the Salang Tunnel for bringing in mining equipment and shipping out some of the mining products is quite likely. Also, several actual and potential mines are located in the area along the B2B road, and the upgrading of the B2B road could give a boost to mining development in that area.

19. Oil wells are currently being developed in the Amu Darya fields, and at least some of the oil output will most likely be shipped over the project roads. The developers have committed to building a refinery in the north. Once it reaches a production level of 20,000 barrels a day, Afghanistan will be close to meeting its current oil demand. Most of this will likely be shipped by road, with an estimated 50 trucks a day hauling fuel to Kabul via the Salang Tunnel and some to Banyam Province and south eastern parts of the country through the B2B Highway.

20. The Hajigak iron mine could also benefit from better Trans-Hindukush road connections. The start-up of exploration is expected soon and production, if successful, will likely be reached around 2020. The means for transporting iron ore and/or refined iron products such as steel are still being studied. One scenario under consideration is for iron ore to be shipped by rail to Dar-e Suf or Mazar-e Sharif where a rolling mill would produce steel, some of which would be shipped out by rail to Central Asia with the rest to be used for local consumption. Under such a scenario, an estimated 100 to 200 trucks a day would use the Salang Tunnel and the B2B Highway to bring steel to the Kabul and other markets in southern Afghanistan.

21. Other mining resources that could also potentially benefit from the improved roads include limestone, tin, tungsten, borates, potash, marble, and granite. Once developed, these resources could serve both local market demands as well as be exported. Having affordable and reliable links across the Hindukush between north and south will contribute to the economic viability of developing these potential industries.

ANNEX 5

PROJECT LINKAGES TO POVERTY REDUCTION AND TO BROADER DEVELOPMENT ISSUES

Afghanistan: Trans-Hindukush Road Connectivity Project

1. This Annex draws directly on analytical work done recently by the World Bank in the context of (i) the Afghanistan *Systematic Country Diagnostic* - SCD[16], (ii) the *Afghanistan Economic Update* of April 2015 and (iii) the document titled *Afghanistan - Pathways to Inclusive Growth* of March 2014. It also draws on a recent ESCAP study on Afghanistan's actual and potential cross border trade[17]. These documents identify linkages between Afghanistan's geographic areas of high poverty and inequality, and to various factors and causes, one of which is physical isolation and the resulting lack of access by populations to markets and services. The wider area of influence of the two roads to be upgraded and rehabilitated through the Trans-Hindukush Road Connectivity Project includes the regions with the highest concentration of poverty in Afghanistan, namely the Northeast, West-Central, and Eastern regions. The analytical work carried out also identifies the improvement of physical transport infrastructure, especially roads, as a major opportunity for economic growth and poverty reduction linked to the development of Afghanistan's natural resources, which is especially applicable in the case of the two Trans-Hindukush roads, the Baghlan to Bamiyan (B2B) road and the Salang Pass.

Overcoming regional disparities and improving cross-border trade through better Trans-Hindukush road connections

2. Afghanistan's unique geographic location at the crossroads of South, Central, and West Asia offers the opportunity to mitigate regional stress factors. The SCD analysis concludes that Afghanistan will need to engage proactively to establish its role as a transit route linking Central Asian countries with South Asian countries. *The main Trans-Hindukush road, the Salang pass, is a key section of this transit route, with about 35 percent of vehicles travelling on the road having their origin and/or destination outside Afghanistan.* Improving the two Trans-Hindukush roads can establish Afghanistan's role as an important economic partner in the broader Region and help to therefore mitigate regional stress factors driving fragility.

3. *Cross-border trade and regional connectivity.* To succeed in the coming years, Afghanistan should take advantage of its unique geographical position as a 'land bridge' linking Central and South Asia, as well as making use of its substantial natural resources. Considerable long-term benefits to employment, revenues and economic growth are available, both to Afghanistan and its Central Asian neighbors, if a successful regional framework can deliver on the region's trade, transport, and transit potentials. Regional co-operation can bring specific benefits in terms of: economies of scale to increase local supply capacity and improve access to markets; integrated or harmonized treatment of trans-boundary issues such as trade, regulatory frameworks

[16] Draft Concept Note, Afghanistan Systematic Country Diagnostic, March 2, 2015

[17] "Strengthening Trade and Economic Ties between Afghanistan and neighboring countries in Central Asia - An assessment of current patterns of trade and investment and prospects for enhanced cooperation", ESCAP, March 2015

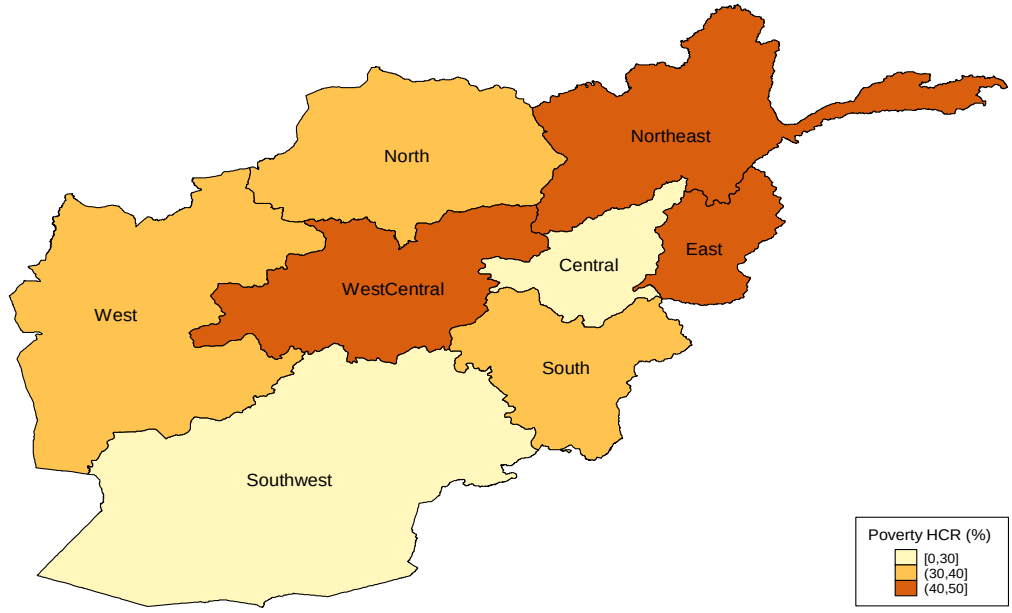
and policies, and regional infrastructure; and management of shared natural resources. For Afghanistan and Central Asia, particular opportunities exist in energy trade, transit trade, and border trade among populations close to crossing-points. Regional integration is thus a vital component in managing a successful transition in Afghanistan. Indeed, for landlocked countries such as Afghanistan and the Central Asian Republics, regional integration is especially imperative: increasing regional integration not only encourages increased trade and connectivity within the region, but also, by creating links across the region to external markets, enables broader integration with large regional markets and the global economy more broadly.

4. In terms of regional trade partners, Afghanistan's trade in merchandise goods is heavily concentrated, with Pakistan being by far the largest trading partner for Afghanistan, accounting for 47% of exports and 14% of imports in 2013 according to WTO figures. However, Pakistan's likely true share of both is higher as much trade is not adequately recorded. *The Salang Pass road carries a large part of the trade between Northern Afghanistan and Pakistan, and it is Northern Afghanistan's transit route to the sea.*

5. *Increased disparities in living standards between Afghanistan's internal regions contributed the most to growing inequality in the country.* As can be seen in the Figure further below, poverty rates are highest and levels of wellbeing lowest in the Northeast, West-Central, and Eastern regions. Also, 40 percent of the poor reside in two regions of the country—Northeast (20 percent) and Central (20 percent) which are separated by the Hindukush mountain range. The two Trans-Hindukush project roads not only directly connect the Northeast and Central regions, but also connect these two regions with those parts of Afghanistan that are located on the other side of the Hindukush mountain range (see also the project maps in Annex 5). Regional disparities are growing – they accounted for 15 percent of inequality in 2008 and for 19 percent in 2012. One region in particular, the Northeast, seems to be hindering the impact of growth on the nation's poverty reduction. While it is true that lagging regions, like the Northeast, are falling farther behind other regions, the inequality within regions has not dramatically changed. This suggests that regional disparities and not demographic disparities are contributing the most to the country's growing levels of inequality.

6. As mentioned above, 40 percent of Afghanistan's poor reside in two regions of the country (Northeast and Central) that are separated by the Hindukush mountain range and directly linked by both the B2B road and the Salang pass. The large contribution of the Central region to the poor population is a direct consequence of its large share of the total population (26%), since its poverty rate is lower than the national average (28%). After the Northeast and the Central regions, the East and the North contribute each 13% of the poor, and these regional are also both separated by the Hindukush mountain range, with the two project roads providing the closest road connection.

Figure: Regional Disparities in Poverty Head Count Rates



Source:NRVA 2011-12

7. *The spatial concentration of poverty appears to be related to remoteness, shocks, and dimensions of fragility.* The evidence indicates that the Northeast, North, and West Central Regions, where poverty incidence is higher, are more remote measured by their geographic elevation and rugged topography which make it difficult to reach markets and provide social services. These areas are also more frequently exposed to climate shocks such as flooding and frost and also suffer from loss of assets such as land and housing which may be related to climate shocks. Finally, these areas also exhibit a low presence of foreign and national troops and low flows of security aid (CERP) which may suggest a low integration with large part of the Afghan economy that relies heavily on aid.

8. Reducing poverty and improving shared prosperity in Afghanistan will also require improved spatial inclusion, such as improved road networks, enhanced focus on agriculture, more targeted provision of services, and mitigation of shocks. Additional work could explore in greater detail some of the explanations for certain regions lagging behind. How do geographic, topographic or structural differences between regions contribute to regional disparities? How does the isolation or connectedness of certain regions contribute to poverty reduction? Answering these questions will also involve a look at the patterns and drivers of growth and service delivery across Afghanistan.

9. The SCD points out that although extractive industries currently account for a very small share of GDP, they have significant potential in light of Afghanistan's deposits of copper, iron ore, and hydrocarbons. The B2B road will greatly improve access to one of Afghanistan's prime mining areas. Extractives themselves may not produce large numbers of jobs, but leveraging the resources and building linkages can stimulate job creation in upstream and downstream sectors. Moreover, extractives have the potential to contribute substantially to government coffers. The SCD states that unlocking the potential of extractives will also require progress on the legislative and regulatory framework as well as *securing financing for the necessary infrastructure* - - which is what the proposed Grant for the Trans-Hindukush Road Connectivity Project does. Furthermore, a strong sector vision based on the Resource Corridor initiative can promote economic linkages by aligning actions and investments in four areas: *physical infrastructure*, livelihoods, environmental and social impact, and governance.

10. Going forward, the challenge for Afghanistan will be to continue to expand access (including physical access) to services in a sustainable manner, while improving targeting and effectiveness to enhance the impact on inclusion and fragility. The proposed Trans-Hindukush Road Connectivity Project is part of this strategy. With levels of education, health, and infrastructure access among the lowest in the world, Afghanistan will need to continue expanding service delivery across the board. Service delivery plays a dual role in Afghanistan: promoting social cohesion and trust in public institutions, while laying the foundation for inclusive job creation and growth.

The Trans-Hindukush roads as an enabling factor for natural resource development

11. Afghanistan's large natural resource base is undeveloped. The country has a portfolio of minerals, from well-documented assets in copper, coal, iron ore, gold, and oil and gas, to more speculative deposits in those minerals as well as lithium and others.

12. In recent years, the government has made much progress in creating an enabling environment for private investment in the extractive sectors. Recognizing the need for reforms, the government, with support from international partners, restructured the Ministry of Mines and Petroleum, built up capacity among its core staff to tender, negotiate and manage contracts, revamped a number of laws and regulations and improved overall governance and transparency of the sector. As a result, the government succeeded in attracting international investors for the development of two large-scale mining deposits in Aynak, Hajikgak, and Amy Darya. Contracts for another 11 prospective mines are expected to be tendered in the near future.

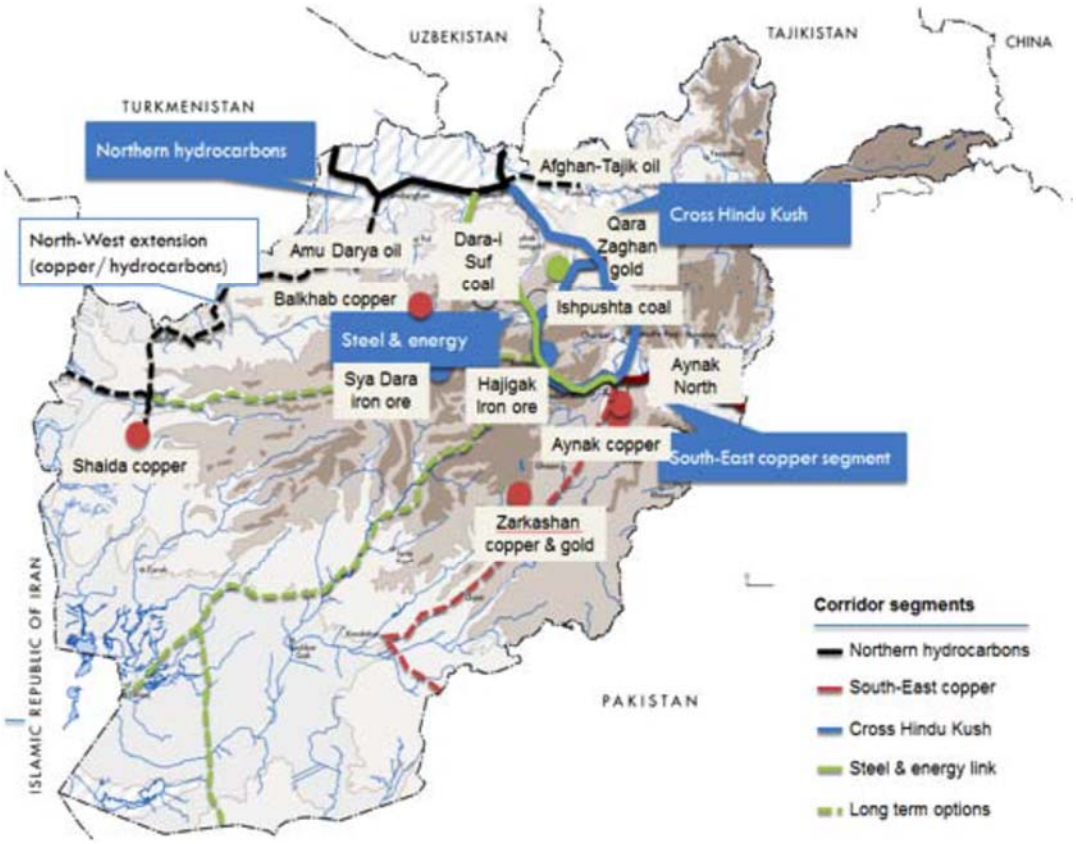
13. However, there are still a number of imposing constraints to the growth of the mineral sector. The National Priority Program on Extractive Industries Development recognizes, first and foremost, that there is a general lack of critical infrastructure, *poorly developed roads*, an *absence of rail and road links to land ports*, insufficient power and water distribution systems, and poor spatial planning that limit production and access to regional and global markets.

14. Applying a *corridor concept* to natural resource development could help to maximize impact and make minerals more inclusive. One of the largest pitfalls in developing the mineral sector is that extractive activities often happen in isolated, local enclaves, with many inputs

(including labor) imported from other countries, minimal infrastructure directly linked to the mines but without much other development around it. Breaking out of enclave development, requires a broader approach that uses resource extraction as an anchor for subsequent development of local upstream and downstream industries, infrastructure connectivity, and spillovers to the rest of the economy. Such a "resource corridor" approach is more than a geographic concept; it is defined as "a strategic sequence of investments and actions to leverage a large extractive industry investment in infrastructure, goods and services, into viable economic development and diversification along a specific geographic area".

15. The Afghan government has recognized the importance of such an approach in *its National and Regional Resource Corridor Program (NRRCP),* one of the National Priority Programs (NPPs). The program is a powerful approach to generating inclusive growth from a sector that otherwise might be an enclave of isolated activities. As set forth by the Afghan government, the Resource Corridor process divides the extractive industry investments into four dimensions: infrastructure (developing *roads*, power, water and rail), livelihoods (creating jobs), governance (strengthening governmental financial management and monitoring of revenues and policy implementation), and environmental impact and social issues (mitigating environmental impacts, especially to water, and ensuring that benefits are shared throughout each region).

16. The government has also has identified the short-, medium- and long-term actions needed to achieve this development (see Map further below). The first such segment to come online will be developed in the north, around the hydrocarbons. The second will be in the east, anchored on Aynak and the coal fields, while also touching the gold deposit at Qara Zaghan. The third segment is not anchored in any specific resource investment, but connects the country and expands the number of transport options for each of the resource investments and associated activities. This segment – the "cross-Hindukush" – is anchored on the Salang Pass road and tunnel, the B2B road and on a North-South transmission line which bypasses the Salang. Both of these critical investments align closely with strategies and plans developed within sector processes (e.g., the Salang Pass and B2B road being identified as a critical road investments in transport plans and the transmission line fitting in the Power Master Plan). The Map below shows the resource corridors, with the "Cross-Hindukush" corridor which includes both project roads, the Salang Pass and the B2B road.


UZBEKISTAN
TAJIKISTAN
CHINA
TURKMENISTAN
Northern hydrocarbons
Afghan-Tajik oil
Cross Hindu Kush
North-West extension (copper/ hydrocarbons)
Amu Darya oil
Dara-I Suf coal
Qara Zaghan gold
Balkhab copper
Ishpushta coal
Steel & energy
Sya Dara iron ore
Hajigak iron ore
Aynak North
Aynak copper
South-East copper segment
Shaida copper
Zarkashan copper & gold
ISLAMIC REPUBLIC OF IRAN
PAKISTAN
Corridor segments
Northern hydrocarbons
South-East copper
Cross Hindu Kush
Steel & energy link
Long term options

ANNEX 6

IMPLEMENTATION SUPPORT PLAN

Afghanistan: Trans-Hindukush Road Connectivity Project

Strategy and Approach for Implementation Support

1. The strategy for implementation support has been developed based on the nature of activities involved in the project and the commensurate risk profile in accordance with the risk assessment. The Implementation Support Plan, as described below, will be a live document and will be reviewed regularly and revised as and when required during the implementation, at least on a half yearly basis.

2. **Third-party Monitoring (TPM) as a response to security challenges.** For some time now, the security conditions in Afghanistan have been such that World Bank staff cannot easily travel to project locations outside Kabul and increasingly travel to Afghanistan by Bank staff is not possible at all. Field visits are however an important part of the Bank's due diligence activities to ensure that projects are implemented correctly. This is particularly important for road projects. Since it presently seems unlikely that security conditions will improve enough to allow for regular site visits by Bank staff, the use of Third Party Monitoring (TPM) will be implemented by the Bank for this project. This could be part of a broader strategy by the Bank to use Third Party Monitoring in Afghanistan for all projects requiring field visits by Banks staff.

3. **Scope of work of TPM consultant**. Under this project, the TPM consultant's scope of work will be to carry out site inspection visits to verify that the physical implementation of projects is carried out in accordance with engineering designs and signed contracts, and in compliance with the environmental and social management plans. The TPM consultant will report on any technical and social/environmental issues found during the visits and highlight any cases of non-compliance. The TPM consultant will also verify and report on the physical progress of works and compare actual observed progress with what is reported in the supervision consultant's monthly reports. Any serious cases of non-compliance are to be brought to the immediately attention of the TTL through a 'red flag' system including photographs and GPS referencing. TPM site visits may also include interviews with local residents and beneficiaries, including women (where local customs allow). The TPM consultant will be hired by the Bank and should be in place by the time the physical works start on site (approximately February 2016).

4. **Technical Support.** The World Bank will provide required technical support through sector specialists to finalize the technical aspects of the engineering and bidding documents, and to monitor project implementation. The implementation support will be provided through at least two formal implementation support missions per year and through continuous exchange of correspondence and regular communication between MPW and the World Bank team, which includes staff based in Kabul. Frequent use of telecommunication and short interim visits conducted to maintain a close coordination among the Bank team and the project staff.

5. **Procurement.** Implementation support will include: (a) reviewing procurement documents and providing timely no objection; (b) providing detailed guidance on the Bank's Procurement Guidelines to project staff; (c) monitoring procurement progress against the detailed Procurement

Plan; and (d) identifying the capacity building/training needs of project staff on procurement processing and providing training if required. The support will be provided through regular interactions, including initially three implementation support missions and later two mission annually, and thematic implementation support missions, if required.

6. **Financial management.** The objective of the FM implementation support plan is to ensure the project maintains satisfactory financial management systems throughout the project's life. FM supervisions will be conducted over the project's lifetime. The project will be supervised on a risk-based approach. It will comprise inter alia, the review of audit reports and IFRs, and advice to the World Bank's task team on all FM issues. Based on the current risk assessment the project will be supervised at least twice a year and the frequency may be adjusted when the need arises. The World Bank's Implementation Status Reports (ISRs) will include a FM rating of the project. To the extent possible, mixed on-site supervision missions will be undertaken with World Bank procurement monitoring and evaluation and disbursement staff. Based on the outcome of the FM risk assessment, the following implementation support plan is proposed:

Table 1: FM Implementation Support Plan

FM Activity	**Frequency**
Desk reviews	
Interim financial reports review	Quarterly
Audit report review of the program	Annually
Review of other relevant information such as interim internal control systems reports.	Continuous as they become available
On site visits	
Review of overall operation of the FM system	Annually (Implementation Support Mission)
Monitoring of actions taken on issues highlighted in audit reports, auditors' management letters, internal audit and other reports	As needed
Transaction reviews (if needed)	As needed
Capacity building support	
FM training sessions by World Bank FM team	Before Project start and thereafter as needed.

7. **Environmental and Social Safeguards.** The World Bank safeguards specialists in the team will supervise various activities to ensure full compliance with the World Bank's operational policies / procedures and the agreed framework related to environment and social safeguards aspects. The implementation support will be provided through regular interactions, regular half yearly implementation support missions and thematic review missions, if required and in full cooperation with the technical members in the Bank team.

Implementation Support Plan

Primary Focus of Implementation Support

Time	**Focus**	**Skills Needed**	**Resource Estimate**	**Partner Role**
First twelve months	▪ Project design ▪ Terms of Reference ▪ Fiduciary	▪ Technical ▪ Financial management	4-5 staff; 2 trips per staff	Design, procurement

		▪ Procurement ▪ Safeguards		training and supervision
12-74 months	▪ Procurement ▪ Project implementation ▪ Monitoring and Evaluation ▪ Supervision	▪ Technical (Construction and operations) ▪ Financial management ▪ Procurement ▪ Safeguards	4-5 staff; 2 trips per staff	Procurement, financial management, implementation, M&E

Skills Mix Required

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Team Leader/Policy Dialog	1 staff: 20 staff-weeks	15	2 trips of 2 weeks each per year
Civil Engineer	1 staff: 20 staff-weeks	15	2 trips of 2 weeks each per year
Procurement	1 staff: 10 staff-weeks	15	2 trips of 1 week each per year
Financial management	1 staff: 10 staff-weeks	15	2 trips of 1 week each per year
Safeguards	1 staff: 10 staff-weeks	15	2 trips of 1 week each per year

ANNEX 7: MAPS IBRD 41723 AND IBRD 41724

Afghanistan: Trans-Hindukush Road Connectivity Project