

000290 Dec. 12, 2019

## Project Document of the Asian Infrastructure Investment Bank

Sovereign-Backed Financing

**Russian Federation** 

Russian Federation Transport Sector Investment Loan

## **Currency Equivalents**

(As at Oct. 30, 2019)

Currency Unit—Russian Ruble (RUB) RUB1.00 = USD0.016 USD1.00 = RUB63.92

## **Fiscal Year**

Jan. 1–Dec. 31

## Abbreviations

AIIB	Asian Infrastructure Investment Bank
E&S	environment and social
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EIRR	economic internal rate of return
ESF	Environmental and Social Framework
ESAP	Environmental and Social Action Plan
ESDD	Environmental and Social Due Diligence
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESMPF	Environmental and Social Management Planning Framework
ESMS	Environment and Social Management System
ESS	Environment and Social Standard
ESSP	Environmental and Social Safeguard Policies
ESP	Environmental and Social Policy
GDP	gross domestic product
GRM	grievance redress mechanism
GIIP	Good International Industry Practice
IFI	international financial institution
IMF	International Monetary Fund
IP	indigenous peoples
IPP	Indigenous Peoples Plan
IPPF	Indigenous Peoples Planning Framework
km	kilometer
MOED	Ministry of Economic Development
MDB	multilateral development bank
MOF	Ministry of Finance
MOT	Ministry of Transportation
NPV	net present value
NTS	National Transport Strategy
O&M	operation and maintenance
PDS	Project Delivery Strategy
PPP	public-private partnership
PIA	Project Implementation Agency
PIE	Project Implementation Entity
PIU	Project Implementation Unit
PPM	Project-Affected People's Mechanism
RAP	Resettlement Action Plan
RPF	Resettlement Planning Framework

## Contents

1.	SUMMARY SHEET	2
2.	PROJECT DESCRIPTION	4
A. B. C. D. E. F.	Rationale Strategic Fit and Value Addition Project Objective and Expected Results Description Cost and Financing Plan Implementation Arrangements	4 
3.	PROJECT ASSESSMENT	17
А. В.	Technical Economic and Financial Analysis Fiduciary and Covernance	17 19 20
D. E.	Environmental and Social Risks and Mitigation Measures	20 21 25
Ann Ann	nex 1: Results Monitoring Framework nex 2: Environmental and Social and International Relations Eligibility Crite Project	27 Fria for the
Ann Ann Ann	nex 3: Assessment of First Subproject–Kola nex 4: Template for Initial Subproject Report	31 
, u		

## 1. Summary Sheet Russian Federation Russian Federation Transport Sector Investment Loan

Project No.	000290		
Borrower	Russian Federation (Russia)		
Project Implementation Entity	Ministry of Transport		
Sector	Transport		
Subsector	Road–Highway		
Project Objective	To improve road network connectivity in key economic corridors		
Project Description	The project is a sector investment loan that will finance road rehabilitation under selected subprojects.		
	<ul> <li>It will consist of two main parts:</li> <li>Financing of eligible transport subprojects that align with the country's priority and AIIB Transport Sector Strategy. Application of AIIB's Environmental and Social and Procurement policies to all subprojects will ensure high environmental, social, and procurement standards. The first subproject will be Section 26 of R-21 Kola Highway ("first subproject").</li> <li>Project management, monitoring, and subproject preparation support for the federal and local agencies.</li> </ul>		
Implementation	Start Date: Mar. 15, 2020		
Period	End Date: Mar. 15, 2028		
Expected Loan Closing Date	Sep. 15, 2028		
Cost and Financing Plan	Indicative Program Cost: USD3,467 million Total Project Cost: USD500 million Total AIIB Financing: USD500 million		
Size and Terms of AIIB Loan	<ul> <li>oan USD500 million sovereign-backed loan</li> <li>Final maturity of 20 years including a grace period of eigyears, average maturity of 14.25 years.</li> <li>AIIB's standard fixed-spread interest rates for sovereigbacked loans.</li> </ul>		
Cofinancing	Not applicable.		
(Size and Terris)	P		
and Social Category			
Risk (Low/Medium/High)	Medium		
Conditions for Effectiveness	<ul> <li>the Agency Agreement has been executed on behalf of the Borrower and the Project Implementing Unit, satisfactory to the Bank;</li> <li>the Inter-agency Committee with a composition, resources and terms of reference satisfactory to the Bank has been established by the Borrower: and</li> </ul>		

	<ul> <li>the Project Implementation Manual, satisfactory to the Bank, has been adopted by the Borrower.</li> </ul>
Key Covenants	The borrower will undertake to ensure that each subproject is
	selected according to the agreed eligibility criteria and is
	implemented in accordance with AIIB's policies.
	Dilly will submit quarterly monitoring report, appual progress
	Pio will submit quarterly monitoring report, annual progress
	reports, quarterly interim unaudited financial reports for the
	project, and annual audited project financial statements.
Conditions for Disbursement	AIIB's approval of the first subproject
Retroactive Financing (Loan	Up to USD20 million for the first subproject (20 percent of the
% and dates)	subproject cost) and up to USD100 million cumulatively for the
	project.
Policy Assurance	The Vice President, Policy and Strategy, confirms an
	overall assurance that the Bank is in compliance with the
	policies applicable to the project.

President	Jin Liqun
Vice President, CIO	D.J. Pandian
Director General, IO III	Dong-ik Lee
Manager	Najeeb Haider
Team Leader	Stefen Shin, Senior Financial Institutions Relationship Officer
Team Members	Sangjung Ha, Young Professional
	Jingyi Zhang, Young Professional
	Luquan Tian, Principal Investment Operations Specialist
	Henri Boullier de Branche, Senior Environmental Specialist
Michaela Bergman, Principal Social Development S	
Georgi Georgiev Dzhartov, Social Development Sp	
	Giacomo Ottolini, Senior Procurement Specialist
	Yi Geng, Senior Financial Management Specialist
	Julius Thaler, Senior Counsel
	Marcin Sasin, Senior Economist

## 2. Project Description

## A. Rationale

1. **The Russian Federation (Russia) is the country with the largest land mass with a population of 144.5 million.** It is an upper-middle-income country with gross domestic product (GDP) per capita at USD10,230 with sovereign credit rating of "BBB-/A-3." This is comparable with Malaysia (USD11,239, A-), China (USD9,770, A+) and Kazakhstan (USD9,331, BBB-).<sup>1</sup> Russia's economy is on a recovery path from the 2015-2016 recession. The International Monetary Fund (IMF) has projected the GDP growth rates of 1.9 percent for 2020, supported by the ongoing increase in government spending. See Annex 5 for further macroeconomic information.

2. **Russia has a relatively developed infrastructure, but its financing has been volatile and insufficient to meet the country's infrastructure needs.** The federal budget has been the primary source for Russia's transport infrastructure. About 40 percent of Russia's federal budget revenue comes from oil and gas exports.<sup>2</sup> When the oil price drops, the effect on government revenue indirectly affects infrastructure spending (Figure 1). Currently, about 15 percent of the federal budget is for infrastructure, of which road sector accounts for a quarter of the infrastructure budget (four percent of total federal budget).<sup>3</sup>



Figure 1: National Infrastructure Spending by Sector, Compared to GDP

Source: World Bank Data (for historical GDP) and Global Infrastructure Hub (2018).

3. **Transport, especially the road sector, has the largest financing gap**. Global Infrastructure Hub estimates that Russia requires USD60 billion per year in the next five years for infrastructure. The projected spending of around USD40 billion is leaving about USD20 billion gap every year. Notably, most of this gap is from the road sector. Figure 2 shows that road sector alone needs about USD100 billion between 2020 and 2024.

<sup>&</sup>lt;sup>1</sup> Population: World Bank 2017; GDP per capita: World Bank 2018; Credit ratings: Latest Standard & Poor's rating available as of October 2019.

<sup>&</sup>lt;sup>2</sup> Business Insider. 2018. <u>https://www.businessinsider.com/russia-oil-revenue-about-to-soar-2018-5</u>

<sup>&</sup>lt;sup>3</sup> Rosavtodor/Ministry of Economic Development (MOED) data, October 2019.



Figure 2: Five-Year Russia Infrastructure Forecast, 2020-2024

Source: Global Infrastructure Hub (2018).

4. **Underdevelopment of Road Sector.** Historically, Russia relied heavily on railways and the road network was not prioritized. As Russia became more prosperous, the focus of the country's transportation strategy switched from not only supporting commercial sector to also supporting passenger traffic. Below are the key factors that contributed to the large gap in road infrastructure:

4.1. Road sector has persistently been underfunded. Russia's roads are almost exclusively financed by the federal budget, making it vulnerable to changes in public spending. Breakup of the Soviet Union and economic transition in the early 1990s, the Asian financial crisis and other structural factors negatively affected public spending on roads at both federal and regional levels. Toll roads are less than one percent of the total road network.

4.2. Roads were directly administrated by oblasts before the creation of the Federal Road Agency (Rosavtodor) in 2004. Certain oblasts became more prosperous than others, resulting in inconsistent road conditions and making cross-country travel by vehicle difficult.

4.3. Russian transport network configuration has a typical radial structure with a center in Moscow. All major highways are connected to the capital, and most of the highways are often the only routes. With no alternate routes connecting them, second- and third-tier cities became less developed.

4.4. Most roads were built according to old Soviet standards with a lower axle load (six or 10 tons per axle). Today, as a comparison, the European Union standard is 11.5 tons per axle. Thus, the step-by-step reconstruction of federal and most important regional roads was urgently required in order to meet the new increased axle load parameters.

4.5. The number of private vehicles has grown continuously (Figure 3). In particular. increased volume of heavy cargo traffic has caused major deterioration of roads that were already in poor condition.



Figure 3: Vehicles and Roads Growth in Russia

Source: EMIS. 2018. Russia Transportation Sector 2019-2020

5. Institutional context is key to understanding Russia's road sector. Russia's road network is largely divided into three categories. This determines how roads are funded and managed (Figure 4).

5.1. Publicly Funded Federal Roads. The total length of the federal network is currently 53,070.5 kilometers (km) comprising 115 federal highways. About 99.5 percent of this (50,133.8 km) is funded by the federal budget, and managed by Rosavtodor—a federal authority responsible for all aspects of federal roads, including construction, rehabilitation, maintenance, operation and quality monitoring.

5.2. Public-Private Partnership Toll Roads. About 0.5% of the federal roads are toll roads under public-private partnership (PPP) arrangements, overseen by Avtodor. Development of toll roads has been constrained by the federal law requiring the availability of a free public road in parallel with any toll road, in order to ensure road accessibility for the entire population at all income levels. This means that unless a public road network already exists, Russia's PPP potential would be limited even in economically viable sections.

5.3. Regional, municipal, and local roads amount to a total of 1.44 million km, managed by the transport office under each provincial government, funded by the provincial budget.



Source: Rosavtodor

# 6. Key challenges in Russia's road sector are concentration of funding sources, road quality and network bottlenecks.

**6.1. Funding Sources.** Ministry of Transportation (MOT) and Rosavtodor are exploring new funding strategies to diversify and scale up road sector financing. Two funding sources are particularly important: international financial institution (IFI) financing to support projects with low financial viability and expand international financing experience, and over time, PPPs and private sources for economically viable sections. The last IFI financing for federal road was more than 20 years ago (see Paragraph 13).

**6.2. Road Quality.** The lack of funding has resulted in poor road quality. The problem has been exacerbated by an increase in the volume of passenger and freight vehicles and large variance of climatic and weather conditions in some regions, adding additional stress to the roads. The result is a huge backlog of roads that need rehabilitation and upgrading as well as the need for expansion.

**6.3. Network Bottleneck.** The inadequacy of quality and network of roads lead to heavy congestion and bottlenecks, causing delays and extra cost burden on road users. Many routes pass through residential settlements. Many trucks travel on these routes, resulting in high congestion, traffic accidents and air pollution. Network quality is uneven between

regional and federal roads, causing breakage in many parts especially in large areas in Siberia and the Far East.

7. **Recent regulations reflect the government's commitment to address these issues.** The National Transport Strategy (NTS) 2030<sup>4</sup> prioritizes the quality, accessibility and safety of transportation for Russia's population. There are also plans for network integration to achieve a seamless, nationwide quality network skeleton. Presidential Decree No. 204 on National Goals and Strategic Objectives of the Russian Federation (May 7, 2018) includes road sector-specific goals to reduce the share of roads operating above the overload threshold, reducing the number of zones of traffic accident concentration, reducing traffic accident mortality and conducting phased development of transport communications between the administrative centers and other cities.<sup>5</sup>

8. **However, the scale of the challenge requires enhanced cooperation.** Rosavtodor has a three-phased plan to road sector development:

8.1. Rehabilitate and upgrade existing federal roads to recover their functions according to national standards and align with international standards. In the western part of Russia, road standards are already aligned with the UN Economic Commission for Europe standards. Work is ongoing to align Eastern Russia's road standards with the UN Economic and Social Commission for Asia.

8.2. Integrate more provincial roads to the federal network to complete the national skeleton and ensure consistency of quality across the road network. By 2031, Rosavtodor plans to transfer 16,500 km from the regional to the federal network.

8.3 Gradually expand the network through new construction, enhance the granularity of connection and connect remote areas that remain unconnected.

## B. Strategic Fit and Value Addition

9. **The project is aligned with AllB's Transport Sector Strategy.** The project aims to upgrade existing infrastructure<sup>6</sup> where road quality is deficient to service existing or future traffic growth. Selection of subprojects will target key economic corridors and border regions, hence

<sup>&</sup>lt;sup>4</sup> NTS 2030 was initiated in 2009 and was updated in 2014. Key objectives of NTS 2030 include: (i) Create a common national transport system based on the well-balanced and expeditious development of a cost-effective transport infrastructure. (ii) Provide affordable, high-quality transport logistics services in freight traffic to meet national economic development requirements. (iii) Provide affordable, high-quality public transport services in line with social standards. (iv) Integrate the country in the global transport system and tap into the national transport system potential. (v) Increase the safety of the transport system. (vi) Reduce the negative environmental impact of the transport system.

<sup>&</sup>lt;sup>5</sup> Specific targets include: (i) Increasing the percentage of automobile roads of regional significance that comply with the existing standards to no less than 50 percent of their total length. (ii) Reducing the percentage of automobile roads of regional significance that do not meet the traffic demand by 10 percent of their total length. (iii) Reducing the number of accident blackspots on the road network by 50 percent. (iv) Increasing the percentage of automobile roads that comply with the existing standards to 85 percent.

<sup>&</sup>lt;sup>6</sup> AIIB. Transport Sector Strategy. 2.5.4. Upgrading of existing infrastructure. https://www.aiib.org/en/policies-strategies/\_download/strategy/transport-sector-strategy.pdf

enhancing trunk linkages and cross-border connectivity.<sup>7</sup> The project contributes to sustainability<sup>8</sup> by improving road use efficiency, introducing AIIB's Environment and Social Standards (ESS) to the implementation of subprojects, and building institutional capacity in Rosavtodor. Upgrading road conditions will allow the roads to become more resilient to the climate conditions.

10. **AIIB's value addition** comes from being a trusted partner to test out a viable financing model and introduce higher standards. This project fits well with Rosavtodor's priority for funding diversification and will allow it to experiment with a small budget. The AIIB loan (USD500 million over five years or roughly USD100 million per year) is about one percent of Rosavtodor's total annual budget. Experience from this project will allow Rosavtodor to demonstrate that international cooperation in a sector that traditionally lacked any source of nongovernment financing is possible. This will help it build relationships with AIIB and with the international financial community going forward, and prepare a base for future capitalization and fundraising for road assets. The sector investment loan will also provide capacity building in technical areas by setting a concrete example through the first subproject and building capacity at a number of local branches. At the sector level, AIIB financing will contribute to reducing the investment gap in Russia's road sector.

11. **This project's value addition to AIIB** is as its first financing in Russia. The relationship built with Rosavtodor and MOT will allow AIIB to better understand the road sector challenges and work with the right counterparts on bigger road sector challenges in the future. The project would also offer an opportunity for AIIB to gain experience in the country. With this project as the first step, AIIB can engage with Rosavtodor and MOT on further upgrading and rehabilitation of roads, financing the integration of regional to national roads and mobilizing private capital.

Lessons learned from previous projects are limited as this is AIIB's first sector 12. investment loan and first financing in Russia. External references in recent years are limited as many MDBs have stopped working in Russia. Further in the past, World Bank and the European Bank for Reconstruction and Development (EBRD) provided policy based loans in the 1990s, with broader focus on economic reform. MDBs also financed sovereign loans in the road sector, including EBRD's St. Petersburg Bypass and Chita-Khabarovsk Road Project in 2002 and World Bank's Highway Rehabilitation and Maintenance in 2001. However, these are from 20 years ago and targeted specific projects rather than the sector. There is a more recent example of a PPP project by EBRD, Western High Speed Diameter Road PPP project (2011), where the client was a private sector consortium. The team has drawn from various technical expertise across AIIB, including staff members who worked at other MDBs in the past, including EBRD and the World Bank. Key lessons learned include the importance of selecting a strong and well-organized counterpart as the implementation agency, agreeing with the implementation agency a set of carefully designed criteria and review process, and conducting frequent monitoring and implementation support visits.

<sup>&</sup>lt;sup>7</sup> AIIB. Transport Sector Strategy. 2.5.1. Trunk linkages, 2.5.2. Cross-border connectivity, 2.5.3. Transport integration. https://www.aiib.org/en/policies-strategies/\_download/strategy/transport-sector-strategy.pdf

<sup>&</sup>lt;sup>8</sup> AIIB. Transport Sector Strategy. 2.2.1. High-quality and sustainable infrastructure. https://www.aiib.org/en/policiesstrategies/\_download/strategy/transport-sector-strategy.pdf

## C. Project Objective and Expected Results

13. **Project Objective.** To improve road network connectivity in key economic corridors.

14. **Expected Results.** Direct project results will include:

15.1. Improved road condition resulting in reduction in travel time and vehicle operation costs.

15.2. Improved road safety resulting in reduction in traffic accidents.

15.3. Improved E&S management when planning, constructing and operating the road sections under the project.

15. The project is expected to generate other broader benefits, such as induced economic benefits from improved transport corridors and cross-border connectivity, and enhanced institutional capacity of project implementation agencies (PIAs) to execute, operate and maintain transport assets.

16. The Project Results Framework (Annex 1) consists of two parts: project level results framework and subproject level results framework. Economic assessment will be conducted for each subproject and formulate baseline and target values relevant for each context.

17. **Expected Beneficiaries.** The primary beneficiaries are the road users who travel along the corridors of this project. The secondary beneficiaries are population of towns and cities along each subproject stretch who would benefit from construction activities or induced economic benefits. Road sector authorities will also benefit from improved institutional and financial capacity for planning, implementing and monitoring road rehabilitation projects.

### D. Description

18. The project is a sector investment loan designed to provide a scaled solution to Russia's road sector by financing subprojects that face a common challenge of road rehabilitation. This approach also allows for operational efficiency by bundling several projects together. A project "template" has been developed for the first subproject, this can be replicated for other subprojects, including the ones not financed by AIIB. It consists of two main parts:

**19.1. Part A: Road Rehabilitation and Upgradation Subprojects.** Two principles will guide the selection of subprojects: (ii) alignment with the country's priority and (2) alignment with AIIB's Transport Sector Strategy, Sustainable Infrastructure and Cross-Border Connectivity themes. Based on the strategic alignment, subprojects must meet the eligibility criteria in Table 1. Currently, one subproject has gone through the assessment and has confirmed its inclusion in the project: Rehabilitation and Upgrade of Section 26 of R-21 Kola Highway.

Strategic	i. It is a road infrastructure undertaken in Russia;		
	ii.	It is be part of the government priorities supported by National Transport	
		Strategy or Presidential Decree	

## Table 1: Subproject Eligibility Criteria

Objective	iii.	It serves to improve necessary transport capacity or remove transport
-		bottlenecks in key economic corridors that connect major urban or industrial
		clusters, or strategic corridors for cross-border connectivity, such as national
		or provincial highways;
Technical	iv.	It concerns the upgrading or rehabilitation of existing road infrastructure
		which will increase safety and benefit the users such as by reducing vehicle
		operating costs and travel time
	v.	It is technically sound supported by full technical design documentations
		prepared according to relevant national regulations;
	vi.	Total construction period for the subproject should be within the
		implementation period of the project.
Economic	vii.	It has well-defined socio-economic benefits supported by economic
		assessments;
Governance	viii.	It is under the administration of Rosavtodor and one of its local branches;
Environmental	ix.	It has obtained all necessary approvals, certifications and permits; and is in
and Social		compliance with all applicable national environmental, social and health and
		safety legislation, and employment regulations and standards in effect in the
		Russian Federation, as well as any relevant public consultation obligations in effect in Russia;
	х.	It is prepared in accordance with the technical, financial, economic, social
		and environmental, fiduciary appraisal policy requirements of AIIB, including
		AllB's Policy on Prohibited Practices, the Procurement Policy and Interim
		Operational Directive on Procurement Instructions for Recipients, the
		Environmental and Social Policy (ESP), Environmental and Social Exclusion
		List, and where applicable, the Environmental and Social Standards 1 to 3;
		and the Operational Policy on International Relations;
	xi.	It complies with the E&S eligibility criteria agreed with AIIB (Annex 2:);
	xii.	It receives security clearance by AIIB that the subprojects are located in
		areas where AIIB staff can travel to.

**19.2. Part B: Project Management, Monitoring, and Subproject Preparation.** Part B will support MOT and Rosavtodor to improve planning, implementation, management and monitoring of subprojects under the project, and more generally, of transport projects, including the assessment and management of environmental and social risks. Part B will also help Rosavtodor to assess financing options and prepare future projects for international financing.

### E. Cost and Financing Plan

19. **Total project cost** is estimated at USD500 million, fully funded by AIIB.

Table 2. Floject Cost and Financing Flan		
	AIIB Fir	nancing <sup>1</sup>
Item	USD m	%
Part A <sup>2</sup>	487.50	97.50%
Subproject 1. Kola	98.00	20%

## Table 2: Project Cost and Financing Plan

Subproject 2. Scandinavia	300.00 <sup>3</sup>	60%
Subproject 3. Ussury	89.50 <sup>3</sup>	17.9%
Part B	12.50	2.50%
PIU budget including 1) operational cost for the implementation period, 2) consultants (E&S, economic assessments, costing review, technical review, procurement support, audit, training, project preparation for future projects etc.), and 3) costs for implementing the ESMPF	12.50	2.5%
Total	500.00	100.00%

Notes:

1. Exclusive of taxes.

2. Contingencies are built in each subproject cost.

3. Estimate.

### F. Implementation Arrangements

20. **Implementation Period.** The project will be implemented for eight years from March 2020 to March 2028. AllB will finance the preparation and construction phase of each subproject. Construction period for each subproject is estimated to be approximately three years. The subprojects are expected to begin construction between 2020 to 2025, depending on each subproject's timeline.

21. **Implementation Arrangement** is illustrated in Figure 5 and Table 3. Effective cooperation with the Russian Federation team is critical for project success to maintain a smooth flow across various departments and functions. AIIB's Project Team has held several meetings to identify the right counterparts and confirm that they have strong competence and commitment.



### Figure 5: Implementation Arrangement

Table 3: Implementation Arrangement			
Entity	Role	Responsibilities	Focal Point*
Ministry of Finance (MOF) Ministry of Economic Developme nt (MOED)	Oversight	<ul> <li>(i) Provide oversight and monitoring according to relevant regulations on project preparation, implementation and monitoring of projects funded by international financial institutions.</li> <li>(ii) Approve procurement plan, implementation plan, progress reports, project budget and execution of the project budget.</li> <li>(iii) Ensure servicing and repayment of AIIB loan.</li> <li>(iv) Agree on subprojects.</li> <li>(v) Where appropriate, address implementation challenges as they arise.</li> </ul>	Deputy Minister, MoED Deputy Director, Department of Investment Policy & Entrepreneurship Development, MOED Deputy Director, Department of Analytical Support to Foreign Economic Activity, MOED
Ministry of Transportati on (MOT)	Project Implementatio n Entity (PIE)	<ul> <li>(i) Budget and funds administration.</li> <li>(ii) Prepare subproject list.</li> <li>(iii) Approve annual implementation and procurement plans.</li> <li>(iv) Coordinate inter-agency committee to decide on important project-related matters, monitor project objectives and coordinate implementation across project stakeholders.</li> </ul>	Minister and Deputy Minister, MoT Deputy Director, Department of State Policy in Road Management, MOT
Entity to be appointed by MOED/ MOF/MOT	Project Implementatio n Unit (PIU)	<ul> <li>(i) Responsible for overall implementation by working with central and local project implementation agencies (PIAs) to ensure project implementation.</li> <li>(ii) Provide necessary technical assistance and capacity support to ensure project quality.</li> <li>(iii) Curry out procurement procedures for central and local PIAs</li> <li>(iv) Methodological/consulting support to central and local PIAs in procurement</li> <li>(v) Prepare all documentation for payments, drawdown and audit.</li> <li>(vi) Conduct financial management.</li> <li>(vii)Focal point for project progress reporting.</li> </ul>	Director General or head of the relevant department
Rosavtodor	PIA	Rosavtodor Headquarters (Central PIA) (i) Propose subprojects.	Director, Kola Office (for subproject 1)

<ul> <li>(ii) Ensure the application of all safeguards and fiduciary standards, including E&amp;S, fiduciary, financial management, etc.</li> <li>(iii) Participate in the evaluation of bids.</li> <li>(iv) Participate in inter-agency committee meeting as the member</li> </ul>	Once subsequent subprojects are confirmed, directors of responsible branches will be the leads.
<ul> <li>Rosavtodor local branches (Local PIAs)</li> <li>(v) Prepare technical specifics for subprojects.</li> <li>(vi) Participate in the evaluation of bids.</li> <li>(vii)Participate in inter-agency committee meeting as the member</li> <li>(viii) Execute the construction of subprojects according to AIIB's requirements.</li> </ul>	

\*Current members. The composition of key Russian Federation team may change in an event of reassignment of roles within the government

22. **Project Implementation Unit.** Ministry of Economic Development (MOED) and Ministry of Finance (MOF) will delegate project daily implementation work to a PIU, according to the Russian Government Resolution 43 "Operational procedures for projects being implemented by the Russian Federation with the assistance of IFIs" (Jan. 28, 2005). The PIU is a specialized, noncommercial entity within the government system whose function is to execute delegated authority for IFI-funded projects. Appointment process is a competitive selection based on a set of qualification and experience criteria. Once appointed, an Agency Agreement will be signed between MOED/MOF/MOT and PIU to define the responsibilities. Currently three suitable entities are identified, including Bureau of Economic Analysis<sup>9</sup>, Foundation for Enterprise Restructuring and Financial Institutions Development<sup>10</sup>, and Foundation for Investment Constriction Projects. <sup>11</sup>

<sup>&</sup>lt;sup>9</sup> Bureau of Economic Analysis (BEA) was established with support of a World Bank Ioan in 1996, by Russian Federation Academy of National Economy and Higher School of Economics (HSE). World Bank projects managed by BEA include: First National Hydromet Modernization Project (RosHydroMet-1) as well as Second National Hydromet Modernization Project (RosHydroMet-2), State Statistical System Development Project (1 and 2), Innovative Development of Pre-school Education in Sakha Republic (Yakutia), Judicial Reform Support Project and Preparation of the National Urban Transport Improvement Project. <a href="http://www.beafnd.org/">http://www.beafnd.org/</a>

<sup>&</sup>lt;sup>10</sup>Foundation for Enterprise Restructuring and Financial Institutions Development (FER) was established in 1996 by Russian Federation Government Administration, MOF and MOED. They are currently managing three World Bank projects: Financial Education and Financial Literacy Project, Forest Fire Response Project and Russian Federation Judicial System Support Project. Completed projects include: Capital Market Development Project Treasury Development Project, Regional Fiscal Technical Assistance Project, Sustainable Forestry Pilot Project, Northern Restructuring Pilot Project and Public Finance Management Technical Assistance project.

<sup>&</sup>lt;sup>11</sup> Foundation for Investment Constriction Projects (FICP) was also established in 1996 by the city of St Petersburg and National Housing Reform Foundation. IFI projects: World Bank-St Petersburg Economic Development, New Development Bank (NDB)-Complex Development of Territory and Infrastructure of Small Historic Settlements, NDB-Water Supply and Sanitation System Development in Russian Federation Cities, World Bank-Housing Reform Project, World Bank-Cultural Heritage Preservation in the Russian Federation and EBRD, EIB-St Petersburg Flood Protection Barrier project. <u>http://www.fisp.spb.ru/</u>

23. All of these entities were established in late 1990s under government order. They have accumulated rich experience by managing over 10 projects financed by other MDBs. The most recent ones including Financial Education and Financial Literacy Project financed by the World Bank (2011-2016), Forest Fire Response Project financed by the World Bank (2013-2019), Second National Hydromet Modernization Project financed by the World Bank (2014-2020) and Judicial System Support Project financed by the New Development Bank (2018-2022). AllB will review the terms of reference, selection process and will have to issue its no objection prior to the commencement of PIU's activities.

24. **Monitoring and Evaluation.** PIU will coordinate the collection of data and individual reports from central and local PIAs. It will also submit a consolidated progress report to AIIB periodically. Detailed monitoring and evaluation arrangements will be included in the Project Implementation Manual with clearly defined roles and responsibilities and templates for periodic and annual progress reports. Table 4 provides an outline of a possible arrangement.

From	То	Frequency	Requirements
PIU	AIIB	Quarterly	(i) Three-page PIMR covering high level
			progress on all workstreams.
			(ii) Quarterly unaudited financial reports.
			(iii) Identification of any issues.
		Annual	(i) Comprehensive progress report on all
			workstream with indication of progress
			results. Detailed template to be developed in
			Project Implementation Manual.
			(ii) Annual audited project financial statements.
		Ad hoc	As needed when critical issues arise
Central and	PIU	Quarterly and	Providing data required for progress reports
local PIAs		Annual	
Central and	PIE	As required by	As required by government internal process.
local PIAs		government	
		internal	
		process	
Local PIAs	n/a	Daily	Daily monitoring of implementation progress

Table	4:	Reporting	Arrangements
IUNIC	<b>-</b>	roporting	/ indiagonionito

25. **Procurement.** The PIU will be responsible for all procurement for Rosavtodor and its branches under the project. For all contracts funded by the loan proceeds, procurement will be carried out in accordance with the AIIB's Procurement Policy of January 2016 and its associated Interim Operational Directive on Procurement Instructions for Recipients, dated June 2, 2016. A draft Project Delivery Strategy (PDS) for each Sub-project, including the procurement plan and contract management, shall be prepared by PIU in consultation with Rosavtodor. The PDS will be approved by the inter-agency committee and AIIB.

26. **Retroactive Financing.** All eligible expenditures under the project, incurred in compliance with AIIB's procurement policies and guidelines and its other policies, including the ESP and in respect of which payments were made not more than 12 months prior to the estimated date of

the loan agreement, up to a total amount of USD 100 million (20 percent of the total project budget) in line with AIIB's policy, may be financed retroactively. For each subproject, retroactive financing should not exceed 20 percent of the total subproject budget.

27. **Financial Management.** MOF will delegate project financial management and disbursement to the PIU. The borrower will maintain an acceptable project financial management system to ensure that project financing is properly used with due efficiency and effectiveness. The PIU shall not, in the course of carrying out any of its activities under the project, gain direct or indirect income, except for the compensation of expenditures related to the execution of legal and other actions under the Agency Agreement in compliance with the cost estimates approved by MOF. AIIB's task team will closely monitor the overall delegation process including reviewing the qualifications and competence of PIU staff, and previous performance of the PIU. According to government internal procedures, the PIU will be appointed before project effectiveness.

28. **AIIB's Implementation Support.** AIIB will (i) provide technical inputs for the preparation of detailed subproject reports to ensure that the subprojects are well-prepared according to AIIB's requirements; and (ii) provide operational oversight on E&S aspects, procurement, contract management and other workstreams during the implementation. AIIB will conduct at a minimum supervision missions every six months combining site visits. It is anticipated that more frequent visits will be required during the first 18 months of project implementation. AIIB specialists will conduct additional technical visits based on the needs of different implementation stages. AIIB may engage external consultants as a liaison with Russian Federation counterparts and as needed to support the above supervision activities.

## 3. **Project Assessment**

## A. Technical

30. AllB's Project Team has conducted an in-depth due diligence on Rosavtodor's implementation capacity, and found that Rosavtodor is capable of implementing the project. For the sector investment loan model to be successful, working with a counterpart with robust implementation capacity is the key. Rosavtodor is the biggest federal agency in Russia's transport sector with a proven track record of managing about USD10 billion budget per year. Rosavtodor has years of experience of managing one of the world's largest road networks. Rosavtodor's key achievements in relation to road quality include the following:

**31.1. Improvement of Federal Road Network.** In 2004, only 30 percent of the federal networks met performance standards. In 2018, this has improved to 80 percent. However, this still leaves about 20 percent of the total federal road network below the designed capacity. Another way to improve road quality is by reallocating roads administrated by oblasts to the federal level, so that these roads can be included in the federal network and managed by federal technical codes. By 2031, Rosavtodor plans to transfer 16,500 km from the regional to the federal network.

31.2. Application of Modern Technologies to Improve Safety, Reduce Operational Expenses and Enhance Comfort for Road Users. For example, weight and dimension monitoring systems are being installed on federal highways to further prevent deterioration of road pavements caused by overloaded cargo trucks. The automated meteorological monitoring system provides a way to predict road conditions depending on the weather, and inform road users about expected difficult weather conditions that may influence traffic.

31. The subprojects will be implemented by the top offices out of 28 Rosavtodor's local branches. Only the local agencies with strong implementation capacity will be selected to implement the future subprojects. This will ensure that the project can be prudently managed under Rosavtodor's internal governance.

32. **Currently, three subprojects are being considered for AllB financing.** Each subproject will go through four layers of oversight by AllB as illustrated in Figure 6: (i) identification, (ii) eligibility screening based on Initial Subproject Report, (iii) review and approval of Detailed Subproject Report and finally, (iv) monitoring.





33. At the first step, MOT/Rosavtodor identified 12 projects for AIIB's consideration, and shortlisted to three as a result of extensive consultation with AIIB. The first subproject, Kola, is considered eligible and AIIB has completed its due diligence. Assessment results of Kola are described in Annex 3:. Scandinavia and Ussury have completed the Initial Subproject Report stage. The initial eligibility screening is positive and the Project Team is reasonably confident that sections under these two corridors will be financed under the project. Given that the total works required in these corridors are above the AIIB financing amount, AIIB and Russian Federation may decide on the most suitable sections within these corridors to finance under the project. Table 5 **Error! Not a valid bookmark self-reference.**provides a summary of the current review status. In an event that either or both of these corridors become no longer viable for financing for any reason, AIIB and Russian Federation will promptly identify alternative subprojects according to the subproject review process.

	Kola	Scandinavia	Ussury
Technical			
Highway/Federal	R-21 St Petersburg –	A-181 Torfyanovka	A-370 Khabarovsk –
Road	Karelia - Murmansk	(Finnish border) – St.	Vladivostok (760
	(1,592 km)	Petersburg (160km)	km)
Sections for Work	Section 26, from km	Section from km 160 to	Five sections
under AIIB	406 to km 422	km 203	between km 527 -
Financing			715.6 km
Section Length (km)	14.82 km	43.41 km	114.28 km
Proposed	USD98 million	USD459 million	USD747 million
Subproject Cost			
Total Program Cost	USD787 million	USD1,330 million	USD1,350 million
for the Corridor			
E&S Category	В	To be confirmed	To be confirmed
Eligibility	Eligible	Assessment in progress	
Institution			
Responsible	Kola Branch	North West Branch	Far East Branch
Rosavtodor Branch			

Table 5: Overview of Proposed Subprojects

Staff Number (as of October 2019)	99 people	244 people	225 people
Rewards History (2016-2018)	Ranked in top 3 in categories of: -"Best in Roads Construction/ Reconstruction" (all three years) - "Best in Roads Operations" - "Best in Asset Management"	Ranked in top 3 in categories of: -"Best in Roads Construction/ Reconstruction" - "Best in Transport Safety & Security"	Ranked in top 3 in categories of: -"Best in Roads Construction/ Reconstruction" - "Best in Construction & Operation of Artificial Structures"

34. **Operational Sustainability**. Rosavtodor has a strong system for operations and maintenance. All subprojects will be managed under its existing structure.

35.1. An annual federal budget is allocated to the local Rosavtodor branches for operation and maintenance (O&M). Each branch has a dedicated O&M team.

35.2. Major O&M works are outsourced to technical companies. Some minor O&M works are done in-house. The Rosavtodor O&M teams and the local transport police conduct routine checks on all roads and alert the responsible departments or contractors for timely repair. There is also an online system where citizens can file complaints. Rosavtodor is obliged to respond within 30 days.

35.3. When a road is under reconstruction or rehabilitation, Rosavtodor temporarily halts the O&M requirement for the respective stretch during the construction period. Once construction is complete, O&M work is either re-tendered or added to existing O&M contractors. Once a road is upgraded to a higher technical category through rehabilitation or reconstruction, it is subject to higher O&M standards and receives higher funding with federal O&M budget.

35.4. Rosavtodor intends to introduce better technologies to lessen road damage, such as overload control. This will allow better collection of excess levies and road taxes, which feed into the federal transport budget, contributing a sustainable financial flow for O&M.

## B. Economic and Financial Analysis

35. Conventional economic appraisal methodologies will be used for the evaluation of each subproject, comparing the "with project" scenario and a baseline "without project" scenario. Typically, for a road rehabilitation project, the economic benefits expected would include reduced travel times, reduced vehicle operation costs and reduced traffic accidents. The economic costs include construction costs, routine maintenance costs during operation and environmental and social costs including externalities. The analysis of economic costs and benefits will be expressed in the economic internal rate of return (EIRR) and the net present value (NPV) for each subproject. The first subproject Kola Section 26 expects an EIRR of 12.6 percent and NPV of USD78.84 million.

## C. Fiduciary and Governance

Procurement. AIIB's Procurement Policy and its associated Interim Operational Directive 36. on Procurement Instructions for Recipients for public sector apply to this project. For each subproject, a PDS will be prepared by PIU in consultation with the central and local PIAs, and be approved by inter-agency committee and AIIB. The Bank's procurement specialist has assessed the capacity of the local Rosavtodor for the first subproject. The Kola PIA will require support in order to comply with AIIB's procurement policy requirements including contract administration, as the staff are not familiar with MDB procurement policies, procedures, or with any internationally recognized form of contract such as International Federation of Consulting Engineers (FIDIC). It is envisaged that the works contract will be procured following International Open Competitive Tendering or IOCT method using tender documents acceptable to AIIB. The PIU will provide the primary support to Rosavtodor and its branches on procurement procedures including contract administration according to AIIB's Procurement Policy. A consultant will be selected to carry out the supervision of the works following International Open Competitive Selection or IOCS method. Another consultant will be engaged to provide technical support to PIU and Rosavtodor to address any gap, including the preparation of specifications and BoQ and training on contract management. All contracts will be subject to AIIB's prior review.

37. **Financial Management.** The financial management arrangements are satisfactory and meet the requirements of Operational Policy on Financing (March 21, 2017). An assessment of project financial management arrangements has concluded that adequate financial management arrangements will be in place for the project to provide reasonable assurance that the proceeds of the financing will be used for the purposes for which they are granted.

38. All the project financial management and disbursement work will be delegated to a PIU. The project financial team will be comprised of PIU staff and professional consultants with required qualifications and experience. Nomination of an acceptable PIU and signing of Agency Agreement between PIU and Russian government will be a condition of effectiveness.

39. The PIU will prepare an annual budget based on the subproject implementation plan and procurement plan. Such annual budget will be approved by MOT, Rosavtodor, MOF and MOED, and will be included into the federal law on the federal budget of each financial year and planned three-year period. Budget classification codes for budget planning and execution will be defined in accordance with Russian budget legislations. PIU will adopt accounting software following Federal Accounting Law based on modified cash basis to maintain separate accounting records for this project. Project financial statements reflecting budget and actual implementation will be generated from the system, which will be provided to AIIB as part of the project's quarterly progress reports.

40. Proper internal control procedures including necessary review, validation, segregation of duty, compliance check, reconciliation, stock take, etc., are all maintained in the PIU. Periodic checks conducted by MOF and MOT will function as project internal audit. Additionally, the Project Operational Manual will include details on internal coordination among various stakeholders, project financial management, internal control, disbursement, accounting, reporting and auditing.

41. The project's financial audit will be conducted on an annual basis. An auditor will be selected following AIIB's procurement policy. The audit report and management letter will be submitted to AIIB within six months after the end of the borrower's fiscal year.

42. **Funds Flow and Disbursements.** The proceeds of the loan will be disbursed primarily using the Advance method. A USD-segregated Designated Account will be established for the project to be managed and monitored by the PIU in accordance with the Agency Agreement. AIIB and the Russian Federation will decide on a suitable bank that can undertake necessarily transactions for the project. Screening, selection and approval of the first subproject will be a condition for disbursement. No disbursement will be made until this condition is met. The advance ceiling will be variable and will be set according to each approved subproject's budget. PIU will provide Statement of Expenditures for each withdrawal request to show evidences of eligible expenditures of each subproject including contract details, as applicable. Each withdrawal application will be prepared and submitted by the PIU to AIIB. PIU will be responsible for retaining all supporting documents and make them accessible for review by the external auditors and periodic AIIB supervision missions. Final arrangements and details will be confirmed once the PIU selection is completed.

43. **Governance and Anti-Corruption.** MOT and Rosavtodor are committed to preventing fraud and corruption. They will ensure that operations of subprojects are in compliance with AIIB's Policy on Prohibited Practices. There are internal mechanisms to ensure transparency, including an electronic procurement system and procurement appraisal. Implementation of the subprojects by PIAs will be monitored regularly by the PIU and PIE, and will be required to notify AIIB within two business days at the latest of any suspected Prohibited Practices and any investigations on Prohibited Practices involving the subproject.

44. **Reporting and Monitoring**. The prospective PIU candidates are entities under the government structure dedicated to manage IFI projects and are familiar with implementation standards and monitoring requirements. Although new IFI-financed projects had halted for a period, these entities continued to manage existing programs financed by the World Bank and EBRD. The project team has conducted preliminary review of three relevant agencies and is satisfied with their general competence and professionalism.

## D. Environmental and Social

45. **Environmental and Social Policy and Categorization.** AllB's Environmental and Social Policy (ESP), including the Environmental and Social Exclusion List and Environmental and Social Standards (ESS), are applicable to this project. The project is classified as Category B as the extensive list of E&S eligibility criteria (see Annex 2:) is used for pre-selection. Each proposed subproject is required to go through the due diligence process prior to AllB's determination as to whether it may be included in the project and financed under the loan. This will limit the number of potentially adverse environmental and social impacts so that they should not be unprecedented and generally not irreversible or cumulative, but instead should be limited to the project area, and capable of successful management using good practice in an operational setting. The environmental and social due diligence (ESDD) conducted on the first subproject – the Section 26 of the R-21 "Kola" Highway – has confirmed its categorization as B.

46. **Environmental and Social Risk Assessment and Management.** With necessary support from the PIU, the central PIA will be required to adopt and implement an Environmental and Social Management Planning Framework (ESMPF), including a Resettlement Planning Framework (RPF), an Indigenous Peoples' Plan Framework (IPPF) and a Stakeholder Engagement Plan, prepared in accordance with the ESP, and to maintain sufficient competent resources to oversee its implementation by local PIAs across all subprojects financed by AIIB. A draft ESMPF, covering the RPF, IPPF and SEP has been prepared and will be finalized and adopted prior to conclusion of negotiations. Costs of implementation of the ESMPF, including preparation of supplementary environmental and social studies and implementation of environmental and social mitigation and monitoring, including where applicable resettlement and measures for Indigenous Peoples, in accordance with AIIB requirements for each sub-project will be comprised in the AIIB financing.

47. While ESS 1 is applicable to all subprojects, the applicability of ESS 2 and/or ESS 3 to individual subprojects will be determined during their preparation to reflect respectively any land acquisition/involuntary resettlement and involvement of indigenous peoples. For all subprojects, the central PIA is required to provide an Environmental Impact Assessment (EIA), social studies and occupational health and safety studies to regulatory standards prepared within the scope of the engineering study and the corresponding clearance from the relevant authorities. These will be used both for E&S screening against eligibility criteria and preliminary categorization for further consideration by the PIU for possible inclusion of the subproject under the project. Upon PIU's confirmation that the subproject would be a good candidate for inclusion, the subproject will undergo a third-party ESDD commissioned by the PIU to confirm the categorization, identify gaps with the applicable ESS and determine the measures to close these in the form of an Environmental and Social Action Plan (ESAP) and align the project with the standards defined in the ESMPF.

48. Some gaps are expected between the ESMPF and Russian legislation due to limitations of the regulatory requirements applicable to the preparation of EIAs, the limited social studies and consultation activities and/or the lack of actionable Environmental and Social Management Plan issued from the regulatory permitting process. In such case, the gaps must be closed by the local PIAs, in the form of supplemental environmental and social studies.<sup>12</sup> After the preparation and review of these additional studies by the local PIAs and central PIA, respectively, and their disclosure for consultation<sup>13</sup> (see Section 53), they will be reviewed by the PIU for compliance with the ESMPF and recommendation for inclusion of the subproject under the project.

<sup>&</sup>lt;sup>12</sup> These additional instruments may include, but are not limited to a biodiversity survey, cultural resources survey, cumulative impact assessment, social survey and impact assessment, waste management plan, contractor management plan, stakeholder engagement plan and subproject level grievance redress mechanism (GRM), and, where applicable, a Resettlement Action Plan (RAP), Indigenous Peoples Plan (IPP) or Biodiversity Action Plan.
<sup>13</sup> The local PIAs will be responsible for conducting stakeholder engagement, including the disclosure of all relevant environmental and social instruments, consultation with local stakeholders and continuous stakeholder engagement during construction and O&M of the subprojects. The central PIU will also be required to disclose information on subprojects and the associated environmental and social instruments on its websites for a consultation period before the allocation of AIIB's funds.

49. Key environmental and social issues associated with the project have been identified through literature review on E&S impacts from road construction and O&M in Russia, professional experience of AIIB's E&S specialists and authors of the ESMPF, a site visit by the E&S specialists to the first subproject and a third-party ESDD on the first subproject. These impacts relate to the physical and biological environment, communities and project workers in ways that can generally be managed through applying good practice under the ESMPF and ensuing mitigation and enhancement measures in the form of an ESMP to be developed for each subproject.<sup>14</sup>



#### Figure 7: Subproject E&S Risk Management Process

50. **Project Environmental and Social Oversight.** The PIU will be required to present to AIIB the proposed preliminary environmental and social categorization at an early stage of the subproject preparation for consultation with AIIB's Project Team. One of the prerequisites for AIIB agreeing to include a subproject under the project would be the provision by the PIU to AIIB of an

<sup>&</sup>lt;sup>14</sup> Impacts during construction of subprojects include, but are neither limited to nor always comprising: (i) emissions to air, noise and vibration; (ii) ecological impacts due to river crossings and vegetation clearing; (iii) soil compaction and changes to hydrology and hydrogeology; (iv) siltation of surface water bodies; (v) waste and effluent generation; (vi) temporary disturbance to utilities such as power, water, gas and telecoms networks; (vii) disturbance of traffic during construction; (viii)proximity of construction sites and camps from residential areas; (ix) permanent and temporary changes in land use and potential land acquisition and (x) may induce impacts on cultural resources and indigenous peoples in some locations. In some instances, cumulative impacts may be induced by roadworks. During operation and maintenance of the roads, the principal impacts normally comprise, but are not always limited to: (i) air and noise emissions and vibration; (ii) changes in surface and shallow groundwater flows; (iii) capture and discharge at specific locations of rainfall from the drainage system; (iv) speed increase and increased road width endangering nonmotorized vehicles, migratory fauna and pedestrians and (v) reduction in traffic at roadside service facilities along original road sections being bypassed. The upgrading of road sections will enhance economic activities by (i) allowing greater and faster traffic flow, (ii) avoidance of residential areas when these are bypassed, (iii) design and maintenance of drainage and sewage system to capture and treat before discharging contaminated rainwater and spilled or leaked material and (iv) a reduction of greenhouse gas emissions per kilometer traveled due to improved road surface.

environmental and social appraisal form summarizing the key environmental and social aspects, risks and impacts associated with each subproject, together with the key mitigation measures, disclosure and stakeholder engagement activities conducted during the subproject preparation, and an overview of the applicable grievance redress mechanism (GRM). The PIU would also be required to provide all the required environmental and social documentation (in English and Russian), including an ESMP based on the ESMPF (and any RAP or IPP, if applicable) for review by AIIB prior to AIIB's approval of the subproject.

51. **Environmental and Social Monitoring and Reporting.** The PIU will conduct regular monitoring and supervision of the E&S performance of the subprojects against the commitments and requirements indicated in the ESMPF, and each subproject's ESMP. Frequency of monitoring shall reflect the level of E&S risks and impacts of the subprojects throughout their implementation. The following requirements shall also apply:

**51.1. For all Category B subprojects**, the PIU will be required to commission an independent third party to conduct semiannual onsite monitoring throughout the construction phase and at least once within the first 12 months after the commissioning of the financed activities.

**51.2.** For Category C subprojects, the local PIAs would need to submit regular monitoring reports to the central PIA for auditing, and reporting to the PIU throughout the construction phase and the first year of operations of the financed activities.

52. Based on self-monitoring reports by the local PIAs, audit reports by the Central PIA and third-party monitoring reports, the PIU will produce semiannual E&S performance reports based on a pre-agreed format for submission of environmental and social performance reports covering all AIIB-financed subprojects. AIIB will conduct regular supervision missions to monitor the implementation of the ESMPF across the PIU and PIAs, and the E&S performance of subprojects.

53. **Disclosure and Stakeholder Engagement.** The project's draft ESMPF (including RPF, IPPF and Stakeholder Engagement Plan) and the Non-Technical Summary of the environmental and social assessment for the initial subproject, after presentation to the borrower, central PIA and local PIA on Nov. 7-8, 2019, have been disclosed for consultation on the MOED website in Russian at http://economy.gov.ru/minec/about/structure/depsoprved/2019111304 and AIIB's website at https://www.aiib.org/en/projects/proposed/2019/russian-federation-transport-sectorloan.html in both Russian and English on Nov. 14, 2019. Stakeholder engagement will take place with selected national-level stakeholders for the project and project-affected people for the initial subproject in the period immediately following this disclosure and prior to finalizing the disclosed E&S instruments. Going forward, the Non-Technical Summary, ESAP, regulatory EIA and supplementary E&S documentation for each subproject is to be disclosed by the central PIA and relevant local PIA and AIIB as they are prepared. The disclosure is to be followed by a 30-day consultation period prior to the confirmation of the suitability of a subproject to be funded by AIIB. Limited stakeholder consultation has taken place during the preparation of the first subproject, and stakeholders' interviews were carried out during the site visit by AIIB's staff and central PIA's E&S consultant as part of the ESDD. While the project ESMPF and initial subproject Non-Technical Summary and ESAP are disclosed for comments, the central and local PIAs and their E&S consultant will conduct supplementary consultations on the ESMPF with national-level stakeholders such as relevant governmental administrations and representatives of nongovernmental organizations and/or civil society organizations, and with project-affected people at the initial subproject.

54. **Project Grievance Redress Mechanism.** The central PIA will be responsible for the establishment and oversight of a multi-tiered GRM at the project and subproject levels both for communities impacted by the subprojects and also for project workers. The GRMs will be accessible at the construction site, offices of the construction and O&M contractors, offices of the local PIAs, by email and through the central PIA's website. All inquiries and grievances will be recorded at the PIA level and handled consistently across subprojects by local PIAs. The PIU will regularly audit the GRM and include regular reporting on its functioning to AIIB.

55. **Bank's Accountability Mechanism.** AllB's Project-Affected People's Mechanism (PPM) will be applicable to the project. The PPM has been established by AllB to provide an opportunity for an independent and impartial review of submissions from project-affected people who believe they have been or are likely to be adversely affected by AllB's failure to implement its ESP in situations when their concerns cannot be addressed satisfactorily through a project-level GRM or AllB Management's processes.<sup>15</sup>

## E. Risks and Mitigation Measures

56. The project's overall risk is "Medium". Despite it being the first engagement with RF and the first sector investment loan of the Bank, the implementation capacity of RF counterparts and project preparation mitigated many of the perceived risks. The project will only include E&S Category B subprojects, which also lessens the risk. Main risks anticipated at implementation stage are the application of E&S and procurement standards and fiduciary controls on project funds. These risks can be mitigated through adequate technical assistance provided to the PIAs and AIIB oversight. Adequate procedures and requirements will be included in the Project Operational Manual, and further institutional strengthening will be provided during project implementation.

57. The possible risks and mitigation measures are listed below:

Risk	Assessment	Mitigation Measures
Description		
Environmental and Social Risk	Medium	A comprehensive ESMPF has been prepared for selection and assessment of the subprojects by the PIU, adoption of good international industry practice by the central PIA, and development of E&S studies and implementation of mitigations and management measures aligned with AIIB ESP by local PIAs for all subprojects.

Table 6: Summary of Risks and Mitigating Measures

<sup>&</sup>lt;sup>15</sup> For information on how to make submissions to the PPM, please visit <u>https://www.aiib.org/en/policies-strategies/operational-policies/policy-on-the-project-affected-mechanism.html</u>

Inclusion of subprojects in the Project will require prior AIIB approval of their E&S aspects. AIIB will also conduct regular supervision of E&S aspects of subprojects           Monitoring, auditing and reporting will be conducted on a regular basis to inform all parties on the implementation of the ESMPF across the project and E&S performance of subprojects.           The E&S consultant that prepared the ESMPF will conduct a two-day workshop to initiate capacity building of the central PIA and local PIA responsible for the initial subproject.           Part B of the project will support the central and local PIAs throughout the course of the project. These support activities will include engaging external E&S consultants to conduct ESDD and support with the preparation of E&S instruments.           Procurement Risk         High         AIIB will work with PIU and PIA to support and update the PDS and procurement paid during the preparation and implementation of the project. In addition, AIIB will undertake procurement reviews during implementation, as a part of implementation support to Rosavtodor and its branches in preparation for specifications. All contracts funded by the loan proceeds will be subject to AIIB's prior review.           Implementation Risk         Medium         An experienced PIU will be selected by MOED and MOT. Supervision of the works will be carried out by an independent engineering firm as provided for under the Contract Conditions and selected in accordance with AIIB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AIIB's requirements.           Macroeconomic Risk         Medium         AIIB will monitor the macroeconomic environment closely to be able to take timely and approcriate a			Disclosure and stakeholder engagement will be enhanced through the implementation of the Stakeholder Engagement Plan, and a functioning multi-tiered Grievance Redress Mechanism will be put in place.
Monitoring, auditing and reporting will be conducted on a regular basis to inform all parties on the implementation of the ESMPF across the project and E&S performance of subprojects.         The E&S consultant that prepared the ESMPF will conduct a two-day workshop to initiate capacity building of the central PIA and local PIA responsible for the initial subproject.         Part B of the project will support the central and local PIAs throughout the course of the project. These support activities will include engaging external E&S consultants to conduct ESDD and support with the preparation of E&S instruments.         Procurement Risk       High       AllB will work with PIU and PIA to support and update the PDS and procurement plan during the preparation and implementation of the project. In addition, AllB will undertake procurement reviews during implementation, as a part of implementation support to Rosavtodor and its branches in preparation for specifications. All contracts funded by the loan proceeds will be subject to AllB's prior review.         Implementation Risk       Medium       An experienced PIU will be selected by MOED and MOT. Supervision of the works will be carried out by an independent engineering firm as provided for under the Contract Conditions and selected in accordance with AllB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AllB's requirements.			Inclusion of subprojects in the Project will require prior AIIB approval of their E&S aspects. AIIB will also conduct regular supervision of E&S aspects of subprojects
The E&S consultant that prepared the ESMPF will conduct a two-day workshop to initiate capacity building of the central PIA and local PIA responsible for the initial subproject.Part B of the project will support the central and local PIAs throughout the course of the project. These support activities will include engaging external E&S consultants to conduct ESDD and support with the preparation of E&S instruments.Procurement RiskHighAIIB will work with PIU and PIA to support and update the PDS and procurement plan during the preparation and implementation of the project. In addition, AIIB will undertake procurement reviews during implementation, as a part of implementation support missions. The borrower shall engage external technical consultants to mitigate risks of lack of capacity and provide support to Rosavtodor and its branches in preparation for specifications. AII contracts funded by the loan proceeds will be subject to AIIB's prior review.Implementation RiskMediumAn experienced PIU will be selected by MOED and MOT. Supervision of the works will be carried out by an independent engineering firm as provided for under the Contract Conditions and selected in accordance with AIIB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AIIB's requirements.Macroeconomic BiskMediumAn law ill monitor the macroeconomic environment closely to be able to take timely and appropriate actions			Monitoring, auditing and reporting will be conducted on a regular basis to inform all parties on the implementation of the ESMPF across the project and E&S performance of subprojects.
Part B of the project will support the central and local PIAs throughout the course of the project. These support activities will include engaging external E&S consultants to conduct ESDD and support with the preparation of E&S instruments.Procurement RiskHighAIIB will work with PIU and PIA to support and update the PDS and procurement plan during the preparation and implementation of the project. In addition, AIIB will undertake procurement reviews during implementation, as a part of implementation support missions. The borrower shall engage external technical consultants to mitigate risks of lack of capacity and provide support to Rosavtodor and its branches in preparation for specifications. AII contracts funded by the loan proceeds will be subject to AIIB's prior review.Implementation RiskMediumAn experienced PIU will be selected by MOED and MOT. Supervision of the works will be carried out by an independent engineering firm as provided for under the Contract Conditions and selected in accordance with AIIB's 			The E&S consultant that prepared the ESMPF will conduct a two-day workshop to initiate capacity building of the central PIA and local PIA responsible for the initial subproject.
Procurement RiskHighAIIB will work with PIU and PIA to support and update the PDS and procurement plan during the preparation and implementation of the project. In addition, AIIB will undertake procurement reviews during implementation, as a part of implementation support missions. The borrower shall engage external technical consultants to mitigate risks of lack of capacity and provide support to Rosavtodor and its branches in preparation for specifications. All contracts funded by the loan proceeds will be subject to 			Part B of the project will support the central and local PIAs throughout the course of the project. These support activities will include engaging external E&S consultants to conduct ESDD and support with the preparation of E&S instruments.
RiskPDS and procurement plan during the preparation and implementation of the project. In addition, AIIB will undertake procurement reviews during implementation, as a part of implementation support missions. The borrower shall engage external technical consultants to mitigate risks of lack of capacity and provide support to Rosavtodor and its branches in preparation for specifications. All contracts funded by the loan proceeds will be subject to AIIB's prior review.Implementation RiskMediumAn experienced PIU will be selected by MOED and MOT. Supervision of the works will be carried out by an independent engineering firm as provided for under the Contract Conditions and selected in accordance with AIIB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AIIB's requirements.Macroeconomic RiskMediumAIIB will monitor the macroeconomic environment closely to be able to take timely and appropriate actions	Procurement	High	AIIB will work with PIU and PIA to support and update the
implementation of the project. In addition, AIIB will undertake procurement reviews during implementation, as a part of implementation support missions. The borrower shall engage external technical consultants to mitigate risks of lack of capacity and provide support to Rosavtodor and its branches in preparation for specifications. All contracts funded by the loan proceeds will be subject to AlIB's prior review.Implementation RiskMediumAn experienced PIU will be selected by MOED and MOT. Supervision of the works will be carried out by an independent engineering firm as provided for under the Contract Conditions and selected in accordance with AlIB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AlIB's requirements.Macroeconomic RiskMediumAlIB will monitor the macroeconomic environment closely to be able to take timely and appropriate actions	Risk		PDS and procurement plan during the preparation and
Implementation, as a part of implementation support missions. The borrower shall engage external technical consultants to mitigate risks of lack of capacity and provide support to Rosavtodor and its branches in preparation for specifications. All contracts funded by the loan proceeds will be subject to AllB's prior review.Implementation RiskMediumAn experienced PIU will be selected by MOED and MOT. Supervision of the works will be carried out by an independent engineering firm as provided for under the Contract Conditions and selected in accordance with AllB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AllB's requirements.Macroeconomic RiskMediumAllB will monitor the macroeconomic environment closely to be able to take timely and appropriate actions			implementation of the project. In addition, AIIB will
Implementation support missions. The borrowershall engage external technical consultants to mitigate risksof lack of capacity and provide support to Rosavtodor andits branches in preparation for specifications.All contracts funded by the loan proceeds will be subject toAIIB's prior review.ImplementationMediumRiskMediumAn experienced PIU will be selected by MOED and MOT.Supervision of the works will be carried out by anindependent engineering firm as provided for under theContract Conditions and selected in accordance with AIIB'sprocurement policy. It is currently envisaged that local PIAwill be supported by an external consultant to comply withAIIB's requirements.MacroeconomicMediumAIIB will monitor the macroeconomic environment closely tobe able to take timely and appropriate actions			undertake procurement reviews during implementation, as
Image of lack of capacity and provide support to Rosavtodor and its branches in preparation for specifications. All contracts funded by the loan proceeds will be subject to AIIB's prior review.Implementation RiskMediumAn experienced PIU will be selected by MOED and MOT. Supervision of the works will be carried out by an independent engineering firm as provided for under the Contract Conditions and selected in accordance with AIIB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AIIB's requirements.Macroeconomic RiskMediumAIIB will monitor the macroeconomic environment closely to be able to take timely and appropriate actions			shall engage external technical consultants to mitigate risks
Index of capacity and provide capport to Host reader and its branches in preparation for specifications. All contracts funded by the loan proceeds will be subject to AIIB's prior review.Implementation RiskMediumAn experienced PIU will be selected by MOED and MOT. Supervision of the works will be carried out by an independent engineering firm as provided for under the Contract Conditions and selected in accordance with AIIB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AIIB's requirements.Macroeconomic RiskMediumAIIB will monitor the macroeconomic environment closely to be able to take timely and appropriate actions			of lack of capacity and provide support to Rosavtodor and
All contracts funded by the loan proceeds will be subject to AIIB's prior review.Implementation RiskMediumAn experienced PIU will be selected by MOED and MOT. Supervision of the works will be carried out by an independent engineering firm as provided for under the Contract Conditions and selected in accordance with AIIB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AIIB's requirements.Macroeconomic RiskMediumAIIB will monitor the macroeconomic environment closely to be able to take timely and appropriate actions			its branches in preparation for specifications.
AllB's prior review.Implementation RiskMediumAn experienced PIU will be selected by MOED and MOT. Supervision of the works will be carried out by an independent engineering firm as provided for under the Contract Conditions and selected in accordance with AllB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AllB's requirements.Macroeconomic RiskMediumAllB will monitor the macroeconomic environment closely to be able to take timely and appropriate actions			All contracts funded by the loan proceeds will be subject to
Implementation RiskMediumAn experienced PIU will be selected by MOED and MOT. Supervision of the works will be carried out by an independent engineering firm as provided for under the Contract Conditions and selected in accordance with AIIB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AIIB's requirements.Macroeconomic RiskMediumAIIB will monitor the macroeconomic environment closely to be able to take timely and appropriate actions			AIIB's prior review.
RiskSupervision of the works will be carried out by an independent engineering firm as provided for under the Contract Conditions and selected in accordance with AIIB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AIIB's requirements.MacroeconomicMediumRiskAIIB will monitor the macroeconomic environment closely to be able to take timely and appropriate actions	Implementation	Medium	An experienced PIU will be selected by MOED and MOT.
independent engineering firm as provided for under the Contract Conditions and selected in accordance with AIIB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AIIB's requirements.MacroeconomicMediumAIIB will monitor the macroeconomic environment closely to be able to take timely and appropriate actions	Risk		Supervision of the works will be carried out by an
Contract Conditions and selected in accordance with AIIB's procurement policy. It is currently envisaged that local PIA will be supported by an external consultant to comply with AIIB's requirements.         Macroeconomic       Medium         AIIB will monitor the macroeconomic environment closely to be able to take timely and appropriate actions			independent engineering firm as provided for under the
procurement policy. It is currently envisaged that local PIA         will be supported by an external consultant to comply with         AIIB's requirements.         Macroeconomic       Medium         AIIB will monitor the macroeconomic environment closely to         be able to take timely and appropriate actions			Contract Conditions and selected in accordance with AIIB's
Will be supported by an external consultant to comply with         AIIB's requirements.         Macroeconomic       Medium         AIIB will monitor the macroeconomic environment closely to         be able to take timely and appropriate actions			procurement policy. It is currently envisaged that local PIA
Macroeconomic     Medium     AIIB will monitor the macroeconomic environment closely to       Bisk     be able to take timely and appropriate actions			AllB's requirements
Risk be able to take timely and appropriate actions	Macroeconomic	Medium	AIIB will monitor the macroeconomic environment closely to
דעמער איז	Risk		be able to take timely and appropriate actions.

#### Annex 1: Results Monitoring Framework

Project Level Indicators													
		Base-			Cun	nulative	Target V	alues					
Indicator Name	Unit of measure	line Data (2019)	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	End Target	Frequ ency	Responsibili ty
1. Overall program cost <sup>1</sup>	USD billion	0	0	0.3	0.6	0.9	1.1	1.3	1.4	1.5	1.5	1	MoED/MoF
2. Borrower's staff directly involved in the implementation of the project received training on AIIB policies <sup>2</sup>	# People	0	10	20	30	30	40	45	50	50	50	Annual	PIA/PIU
3. Roads rehabilitated and upgraded	Kilometers	0	0	7	14	25	40	55	65	75	75 <sup>3</sup>	Annual	PIA/PIU

Subproject 1: Kola, Section 26 of R-21										
Indicator Name		Base- line			Year	End	Frequen	Deeneneihilitu		
Indicator Name	Unit of measure	Data (2019)	2020	2021	2022	2023	2024	Target	сy	Responsibility
1. Increase in traffic design capacity	vehicles per day <sup>4</sup>	10863	n/a	n/a	20419	20419	20419	20419	1	PIA
2. Reduction in traffic accidents	# fatalities/ injuries per year	1.8 / 9.8	n/a	n/a	165 / 9.00	1.50 / 8.00	1.35 / 7.35	1.35 / 7.35	1	PIA
3. Reduction in travel time	Average minutes to travel Section 26 (Car/Truck)	13.8 / 22.4	n/a	n/a	12 / 18.6	10.2 / 14.8	8.6 / 11	8.6 / 11	1	PIA

 <sup>&</sup>lt;sup>1</sup> Indicate amount of overall government program cost. AIIB financing will only comprise agreed sections of relevant program.
 <sup>2</sup> Key staff directly involved in the project from MOF, MOED, MOT, Rosavtodor, and local Rosavtodor branches
 <sup>3</sup> May be adjusted once all subprojects are confirmed.
 <sup>4</sup> Weighted Average Value of trucks, cars, and buses.

Annex 2:	Environmental and Social and International Relations Eligibility Criteria for the
	Project

Topic/Aspect	Eligibility Criteria
Subproject Type	+ Subprojects can comprise the renovation/upgrading of existing road sections (including creation of newly built bypasses)
	- Subprojects exclude the construction of major infrastructure such as new bridges in undisturbed riverine landscapes and tunnels, and construction in densely populated areas (e.g., road widening in village, town or city).
	- Subprojects cannot impact international waterways as defined in AIIB's Operational Policy on International Relations <sup>1</sup>
	- Subprojects cannot be located in Disputed Areas as defined in AIIB's Operational Policy on International Relations
General	+ All subprojects to undergo environmental permitting as per Russian Federation legislation and obtain Expert Review and Approval
	+ All subprojects to be assessed against AIIB's Environmental and Social Policy (ESP) and Environmental and Social Standards (ESS) as per the ESMPF, including preparation of a subproject specific Environmental and Social Assessment (ESA) and Environmental and Social Management Plan (ESMP) and specialist studies where required (e.g., Biodiversity Action Plan (including Biodiversity Offset Plan), Livelihood Restoration Plan, etc.).
	+ The Project Implementation Unit (PIU) and all subproject implementation agencies need to have established systems and resources (budget and personnel/consultants) to assess, prepare and implement the subprojects as per AIIB's requirements stated in the ESMPF, develop a subproject specific ESMP, monitor its implementation and report accordingly to the PIU and through that one to AIIB.
Biodiversity	No interaction (permanent footprint, temporary land use, emissions (e.g., noise, vibration, discharge, etc.), natural resource abstraction, etc.) affecting environmentally and ecologically sensitive area, such as internationally, nationally or locally protected area, conservation area, or critical habitat as defined in AIIB's ESP and determined as per the Critical Habitat Screening comprised in the ESMPF.
	+ Interaction exclusively with modified habitat and in some instances with natural habitat as defined in AIIB's ESP mitigated through offsets ensuring no net loss of biodiversity.
Natural Resources	<ul> <li>No interaction with, impact on, use of or access restriction to natural resources such as water sources (including surface and ground water), timber, wild fauna, forest products, etc., except for minimized vegetation clearing duly permitted and offset to ensure no net loss of habitat (including fauna and flora).</li> </ul>

<sup>&</sup>lt;sup>1</sup> AIIB. 2017. Operational Policy on International Relations. <u>https://www.aiib.org/en/policies-strategies/ download/operational-policy-on-international-relations/operational-policy-on-international-relations.pdf</u>

Topic/Aspect	Eligibility Criteria								
	+ All impacts on natural resources will be mitigated as per requirements of AIIB's ESP and ESS 1, following methods defined in the ESMPF.								
Pollution Prevention	- No planned discharge into the natural environment during construction, and means to capture unplanned discharges (incidents/accidents).								
	+ Means to capture and treat all surface water runoff prior to discharge into the environment in normal operations and Emergency Response Plan in place to address unplanned events in line with RF regulatory requirements and Good International Industry Practice (GIIP) such as the World Bank Group EHS Guidelines. <sup>2</sup>								
Land Acquisition and Involuntary Resettlement	- All land acquisition shall induce no or minimal physical resettlement (less than 50 households/businesses or fewer than 200 individuals affected by physical and/or economic resettlement) along the logical area assessed.								
	- Land acquisition inducing displacement (physical or economic resettlement) can represent no more than 49 percent of the land used for the subproject (>51 percent in existing RoW and/or state-owned land) and shall affect less than a cumulative 200 individuals (see above).								
	+ All land acquisition, economic resettlement and physical resettlement shall be subject to the preparation of a subproject specific Resettlement Action Plan (or Simplified Resettlement Plan if impacts are minor), compensated at full replacement value and further mitigated with provision of livelihood support, following proper consultation as per the Resettlement Planning Framework included in the ESMPF.								
Indigenous Peoples	- No impacts on land and natural resources subject to traditional ownership or under customary occupation or use; no involuntary relocation of indigenous peoples (IPs) from land or limitations on access to natural resources subject to traditional ownership or under customary occupation or use; and no significant impacts on IP's cultural heritage.								
	+ In case of presence of IPs in the subproject's area of influence, IP Screening is required to determine application of ESS 3, in which case an Indigenous Peoples Plan (IPP) needs to be prepared based on the IPP Framework.								
	+ Meaningful consultation on the subproject with Indigenous Peoples communities and concerned indigenous peoples organizations present in the Area of Influence is to be conducted in a culturally appropriate, accessible and inclusive manner, to facilitate their informed participation.								
Cultural Resources	- No impact on tangible cultural heritage as determined by federal or local regulations, and no impact on natural features and landscapes of religious, aesthetic or other cultural significance.								

<sup>&</sup>lt;sup>22</sup> International Finance Corporation-World Bank Group. <u>WBG Environment, Health and Safety (EHS) General</u> <u>Guidelines (Russian)</u> and <u>WBG EHS Guideline for Toll Roads (Russian)</u>.

Topic/Aspect	Eligibility Criteria
	+ Development of a Chance Find Procedure and management/protection of Cultural Resources identified in the scope of the subproject implementation.
Health & Safety	- No structural blasting within 1.5 kilometers from any residential structure, no work in confined space (i.e. no tunnel).
	<ul> <li>Implementation of GIIP to manage both Community Health and Safety and Occupational Health and Safety</li> </ul>
Stakeholder Engagement, Disclosure	+ All activities will require effective disclosure of project information, including alignment, construction schedule and method, E&S risks and impacts, temporary nuisances/access restrictions and proposed mitigation measures. E&S instruments will be disclosed for no less than 30 days before AIIB approves inclusion of the subproject in the project.
	<ul> <li>Meaningful consultation conducted and properly documented with representative number and types of stakeholders at all stages of project.</li> </ul>
Grievance Redress Mechanism (GRM) and AIIB's Project- Affected People's Mechanism (PPM)	+ Project-level and subproject level GRM are in place and resources are allocated for implementation. The project-affected people will be informed about the GRM and AIIB's PPM by Rosavtodor during project preparation and implementation. Where IP are present in the Area of Influence, the GRM must be culturally sensitive to suit IP communities.

## Annex 3: Assessment of First Subproject–Kola

## A. Subproject Description

1. R-21 "Kola" Highway is an important trunk road of the North-West Federal District, located in the Prionezhsky and Pryazha districts of the Republic of Karelia, connecting through St. Petersburg, Petrozavodsk, Murmansk and Pechenga at the border with the Kingdom of Norway. R-21 is also part of the Trans-European corridor E105, passing from the city of Kirkenes in Norway, through Russia, to Ukraine, Yalta. The road is mainly used for the transportation of logging, timber and stone processing products, agricultural goods and regular passenger traffic. Rehabilitation of R-21 is approved by the Government Decree No. 1596 on Transportation System Development Program (Dec. 20, 2017). It is also consistent with the May Decree and the Government Decree No.2101-r on Comprehensive Plan for the Modernization and Expansion of Highway Infrastructure by 2024 (Sep. 30, 2018).

2. The subproject is to reconstruct Section 26 of R-21, which is a 14.82-kilometer (km) stretch between km 406 to 422 in the Republic of Karelia, 13 km away from the city of Petrozavodsk, Karelia's capital. The subproject is a part of the larger investment program for Section 26 rehabilitation cost is estimated at USD98 million.

3. Section 26 is currently a Category III federal highway with two lanes, one in each direction. As the traffic passes through two villages, Polovina and Vilga, the speed of traffic flow is decreased by half. The constant presence of cargo vehicles passing through the residential areas leads to high accidents and the emission of significant amount of pollutants. The road is operating at above the overload threshold due to increase in freight and passenger transportation.

## B. Rationale—Oblast and Sector Context

4. **Automobilization**. The level of automobilization in the Republic of Karelia increased 2.02 times (from 198.8 cars to 403.1 cars per 1000 inhabitants) for the period 2005-2018, while at national level the increase was 1.88 times for the same period. The increase in private ownership is despite the decreasing population trend. The population in the Republic of Karelia was 628,500 in 2016 and has decreased to 620,400 in 2018. It is projected to decrease until 2027 to 605,200 and begin to increase again gradually. Automobilization in the Republic of Karelia is significantly higher than the Russian average (by 27 percent), and also higher than in neighboring Leningrad and Murmansk regions (by 18.5 percent and 23 percent, respectively).



Figure 8: Number of Private Cars per 1,000 Inhabitants

5. In midterm perspective, the trend to increase the number of personal cars in the Republic of Karelia will continue, therefore, the volume of traffic will rise. At the same time, the commissioning of new and reconstructed roads is significantly lower than the automobilization dynamics.



Figure 9: Road Network in the Republic of Karelia\*

\* In thousand kilometers.

6. **Road network development** has been slow in the Republic of Karelia due to the overall underdevelopment of road sector in Russia, as explained in Paragraph 4. As Table 7 shows, only eight percent of the road network in the Republic of Karelia is Category II. There are 150 populated areas that still lack access to paved all-seasonal roads. Only 8.4 km (0.5 percent) of the total length of federal road network in the Republic of Karelia are Category II with four lanes, and only 116 km (0.7 percent) of the roads meet the European Union standard of 11.5-ton axle load.

Table 7:	Road Network in the Republic of Karelia	

af iteau iteanen by balogenee										
Roads	Total,		Categories of Roads							
	km	IA	IB	IC		II III				V
					Total	otal Number of Lanes				
						2 or 3	4			
Federal	1595.0	0	0	0	118.6	110.2	8.4	873.4	603.0	0
Regional	5157.6	0	0	0	16.0	16.0	0	117.1	1694.6	3329.9

a) Road I	Network by	Categories
-----------	------------	------------

## b) Number of Populated Areas Without Access to Paved All-Seasonal Roads, 2018

Rural Populated Areas by Number of Inhabitants								
Total 5		50 and less	51-100	51-100 101-500		More than 1000		
		159	140	1	14	3	1	

#### c) Challenges of Regional and Inter-Municipal Roads, 2018

Length of roads that meet standards and operational requirements, km	Share of roads that meet standards and operational requirements in total length, %	Length of roads that meet standard on 10-ton axle load	Length of roads that meet standard on 11.5-ton axle load
2072.7	32.0	5169.0	0.0

7. **Absence of Alternative Routes.** R-21 is currently the only road route that connects Moscow, St.-Petersburg, Petrozavodsk and Murmansk. The project on construction of toll highway M-11 as an alternative for old federal road M-10 (E-105) "Rossia" between Moscow and St.-Petersburg will be finalized before the end of 2019 and new highway will be operational along the entire route. In the Republic of Karelia, R-21 is only one north-south route connecting the Murmansk region and the Leningrad region.





## C. Technical

8. The implementation of the subproject will upgrade the technical parameter from Category III (two-lanes) to Category II (four-lanes). The project design has received positive conclusion from the State Expert's Appraisal.<sup>1</sup> It has also been reviewed and verified by AIIB's transport expert.

fable 8: Te	echnical S	Specification	of Section 2	6, R-21	(Post-Rehabilitation)	
-------------	------------	---------------	--------------	---------	-----------------------	--

Road Category	
Construction length	14.819 kilometers (km)
Number of lanes	4
Design speed	100 km/hour
Carriageway width	2x7 meters (m)
Shoulders width	2x3.75 m

<sup>&</sup>lt;sup>1</sup> The Positive Conclusion of the State Expertise No, 00203-18/ГГЭ-10818/15-01 (No. in the Register 00-1-1-3-1845-18).

Type of pavement	Capital (asphalt concrete)
Main works	(i) Expansion to four lanes.
	(ii) Creation of a bypass away from the residential settlements.
	(iii) Separation of traffic flows in opposite directions.
	(iv) Installation of lighting of pedestrian crossings and bus stops.
	(v) Construction of metal corrugated arch structures at
	intersections with the Vilga River.
	(vi) Introduction of load control.

### D. Economic and Financial

9. **Traffic Forecast.** A traffic survey was conducted in 2014, providing forecast until 2034 (Table 9 and Table 10). The traffic pattern is characterized by high-traffic volumes of heavy vehicles. The growth in freight and passenger traffic, mobility of people and fleet of private cars growth are the main factors shaping the prospective traffic.

Road Span	Length,	Annual Av	erage Daily Da	Design Traffic Intensity (Category		
	KM	Trucks	Cars	Buses	Total	III), Vehicles per Day
Start of road route Sta.0+00.0	0	1,618	5,345	70	7,033	10,426
Road span Sta.77+87.9	7.788	1,685	5,569	73	7,327	10,861
End of road route Sta.148+19.17	7.031	1,770	5,849	77	7,696	11,302
Weighted average value	14.82	1,691	5,588	73	7,352	10,863

**Table 9:** Annual Average Daily Traffic of Section 26, 2014

Source: Project Documentation, Chapter 10. Other Documentation Required by Federal Laws. Technical Report. Economic research 5820-ER7, Volume 10.7.

Table 10: Forecasted Annual Average	ge Daily Traffic of Section 26, 2034
-------------------------------------	--------------------------------------

Road Span	Length,	Annual Av	verage Daily Da	Design Traffic Intensity (Category		
	KIII	Trucks	Cars	Buses	Total	II), Vehicles per Day
Start of road route Sta.0+00.0	0	3,809	15,045	190	19,044	19,608
Road span Sta.77+87.9	7.788	3,922	15,494	196	19,612	20,255
End of road route Sta.148+19.17	7.031	4,109	16,232	206	20,547	21,395
Weighted average value	14.82	3,947	15,590	197	19,734	20,419

Source: Project Documentation, Chapter 10. Other Documentation Required by Federal Laws. Technical Report. Economic research 5820-ER7, Volume 10.7.

10. **Economic Analysis.** The economic analysis was conducted based on a standard methodology for appraisal of road investments. Project life is assumed at 25 years from 2020 to 2045 including a construction period of 21 months. The construction costs, annual operation and

maintenance costs are estimated according to the design documents. The traffic forecast is calculated with an average annual growth rate of five percent based on the 2014 survey. A discount rate of 6.5 percent is based on the Bank of Russia key rate for 2034.

11. The economic internal rate of return (EIRR) of the subproject is 12.6 percent and net present value (NPV) is USD78.84 million (Table 11). The economic benefits quantified are travel time saving for passengers and freight carriers due to improved speed, reduction in vehicle operating costs due to improved road conditions, avoided emergency maintenance costs and reduction in road accidents. The project costs comprise of construction and O&M costs. Financial costs are converted based on the Fixed Asset Investment Indices and the Consumer Price Indices in the Forecast of Socio-economic Development of the Russian Federation published by the MoED from 2008 to 2036.

Year	Passenger	Freight	Cargo	Avoided	Maintenance
	Travel Time	Travel Time	Owner's	Costs of	Costs Avoided
	Savings	Saving	Savings	Accidents	
2021	0.27	0.66	0.78	0.08	0.65
2022	1.19	2.88	3.39	0.36	0.68
2023	1.30	3.12	3.67	0.39	0.71
2024	1.42	3.39	3.98	0.42	0.74
2025	1.55	3.66	4.30	0.47	0.77
2030	2.30	5.30	6.23	0.69	0.94
2035	3.31	7.47	8.80	0.98	1.13
2040	4.66	10.38	12.22	1.38	1.38
2045	6.41	14.14	16.63	1.89	135.45
Total	78.83	178.00	209.41	23.38	224.92

## Table 11: Net Benefits of Section 26, Kola (USD million)

USD714.53 million	Cumulative Total
USD78.84 million	NPV
6.5%	Discount Rate
12.6%	EIRR

12. Sensitivity analysis of different scenarios has confirmed the robustness of economic returns (Table 12). The EIRR remains above 10 percent in scenarios where the construction and maintenance costs increase by 20 percent. The risk of these scenarios is low since the materials market is stable and price spikes are not expected. The analysis also demonstrated that in the worst-case scenario with no traffic, EIRR will approach the discount rate. This will make the subproject economically unprofitable. However, the risk of the worst-case scenario is near-zero as it is unlikely that all traffic would shift to other modes of transport (rail and water). Moreover, the automobilization in the Republic of Karelia has grown continuously.

	Scenarios	EIRR	NPV (USD million)	
1	Base case	12.6%	78.83	
2	Maintenance cost increases by 20%	12.3%	74.08	
3	Construction cost increases by 20%	10.6%	60.00	

Table 12: Cost-Benefit Sensitivity Analy	/sis
--	------

4	Both construction and maintenance costs increases by 20%	10.3%	55.25
5	No generated traffic	8.8%	29.82
6	Worst-case scenario (4+5)	6.9%	6.23

13. **Financial Analysis.** Financial analysis is not applicable as the subproject will be wholly financed by the federal budget during construction and O&M.

## E. Implementation Arrangement and Costs

14. **Implementation Arrangements.** Implementation period for the subproject is three years, from 2020 to 2022. Kola Branch of Rosavtodor will be responsible for implementation, procurement and monitoring. Technical support will be provided to familiarize with multilateral development bank practices as indicated in the Project Delivery Strategy under finalization.

15. **Subproject Cost.** The estimated construction cost at 2019 prices is USD98 million. The cost estimate for the subproject has been prepared in compliance with all relevant national regulations. This has been confirmed by the positive conclusion from the State Expert's Review<sup>2</sup> in July 2018. An independent review by AIIB technical consultant has also confirmed this conclusion. Below is a summary of expert opinion:

15.1. The cost estimation compiled is in accordance with the "Methodology for pricing of construction products in the Russian Federation" MDS 81-35.2004. All used costing standards are included in the Federal Register of costing standards.

15.2. A comparative analysis is conducted between Kola Section 26's construction costs with other federal roads included in the Rosavtodor Roadwork Program for 2018-2019. Out of total 65 projects under the program, 20 are used for comparison based on the climatic and geological conditions, scope of work and the partial or full cement-bound surface. The average cost per kilometer (km) of the 20 projects is RUB365 million (USD5.8 million). Kola Section 26's cost per km is slightly lower than the average at RUB344 million (USD5.5 million).

15.3. There are limitations to comparison with commercial projects as 99.5 percent of federal roads are constructed and operated by federal budget. Currently, PPP projects implemented in Russia also use the federal methodology for cost estimate. One full commercial project, the Meredian Highway from the Russia-Belarus border to Russia-Kazakhstan border, has an average cost per km at RUB392 million (USD6.3 million). However, this can be only used as a general reference as the construction conditions (climatic and geological) and technical specifications are different (Category II versus IB).

15.4. To supplement the lack of commercial benchmark, an international comparison was conducted using Germany as an example. Applying the European standards for cost calculation, the cost estimate of Kola Section 26 is seven percent lower. However, this is

<sup>&</sup>lt;sup>2</sup> The Positive Conclusion of the State Expertise No. 00216-18/ГГЭ-10818/07-01 (No. in the Register 00-1-1281-18).

due to the difference in European and Russian methodologies in terms of the items included in the cost estimate. Russian methodology includes preparation of the construction site, design and survey works, construction design supervision and other expenses for construction preparation.

16. Key risks and mitigants for the subproject are summarized in Table 13.

No.	Risks	Assessment	Mitigants		
1	Construction risk	Low	Commodity price index review has been conducted on the pricing of main construction materials. Supply risk for nonmetallic construction materials is low as the North-West federal district is the main region producing crushed stones and sands. There is only one supplier of oil road bitumen in the region, but there are sources in other federal districts.		
2	Cost overrun	Low	Cost evaluation has been conducted to confirm the soundness of estimate. The use of international competitive bidding may result in cost efficiency.		
3	Incompleteness of engineering, geological and geodetic surveys	Medium	Contingency cost is built into the subproject budget for potential survey updates.		

## Table 13: Kola Section 26–Risks and Mitigants

Annex 4: Template for Initial Subproject Report

#### A. Basic Fact

- 1. Project name
- 2. Sector/subsector
- 3. Total project cost
- 4. Funding plan:
  - a. AIIB loan amount
  - b. Government funding
  - c. Third-party funding, if any

## **B. Project Description**

- 1. Location and map
- 2. Project objective
- 3. Institutional Arrangement
  - a. Project Implementation Entity (PIE), central Project Implementation Unit (PIU), local PIU
  - b. Roles and responsibilities
  - c. Focal points for PIE, central PIU and local PIU
- 4. Available documents
- 5. Procurement plan
- 6. Environmental and Social: any foreseeable issues on land acquisition, vulnerable group and indigenous peoples?
- 7. Financial arrangement

## C. Risk and Mitigants

#### Annex 5: Sovereign Credit Fact Sheet

#### Recent Economic Development

Russia is an upper-middle income country with gross domestic product (GDP) per capita of US\$10,230 and a population of 144.5 million. The economy is dependent on energy and other commodity exports. During 2015-16 Russia went through a recession caused by a fall in energy prices and, to a lesser degree, the impact of US and European Union bilateral economic restrictions triggered by Moscow's takeover of Crimea. Despite a short-lived rebound during 2017-18 Russia has not yet fully recovered, with economic growth averaging only 0.6 percent over 2014-19. This has been due to the exogenous shock itself, as well as a decisive policy response needed to restore macroeconomic balance. Falling consumption and investment, driven by weak business and consumer confidence, were behind the slowdown. Growth fell to 0.7 percent in the 1st half of 2019 and is expected to be 1.1 percent for the whole year.

Since the crisis the authorities have managed to put in place a strong macroeconomic policy framework. A fiscal rule has been introduced targeting a zero primary fiscal balance over 2019-24 at the benchmark oil price of \$40 per barrel, with excess oil revenues to be saved in the National Welfare Fund. An inflation targeting regime has been operationalized since 2014, and the ruble is now free floating to mitigate against external shocks and volatile capital flows. As a result, fiscal situation improved markedly (a 3 percent budget surplus in 2018), with financing needs reduced to almost zero. Inflation, currently running at 3.8 percent (as of October 2019), has been brought to historical lows and below the central bank's target of 4 percent. The authorities followed with more reforms, some of them politically difficult, such as pension changes and value added tax (VAT) increases, which further improve the long-term fiscal outlook.

The government started to capitalize on the strong macroeconomic fundamentals to stimulate growth and have announced an 8-trillion-ruble ramp-up in development spending, to be implemented over 2019-24 (that is about 1.1 percent of GDP annually), with half of it going to infrastructure investment. The program has been operationalized in 13 so-called "national projects".

	Act.	Act.	Est.	Proj.	Proj.
Key Economic Indicators	2017	2018	2019	2020	2021
GDP growth	1.6	2.3	1.1	1.9	2.0
Inflation (CPI change, average)	3.7	2.9	4.7	3.5	3.9
Government balance	-1.5	2.9	1.0	0.1	-0.3
Public debt	15.5	14.6	16.5	17.7	18.3
Gross public financing needs	9.1	1.6	-0.3	0.0	0.6
Current account balance	2.1	6.8	5.7	3.9	3.4
FDI inflows		0.5	0.6	0.6	0.6
External debt	32.8	27.4	28.0	27.6	27.5
Gross external financing needs	3.6	0.0	0.3	0.9	1.1
International reserves (months of imports)					
	15.9	16.4	17.6	18.1	18.4
Broad money growth (ruble-denominated)					
	10.5	11.0	8.8	7.4	7.1
Exchange rate (average RUB/US\$)	58.3	62.7	65.4		

Notes: Levels in percent of GDP, changes in percent per year—unless indicated otherwise Source: IMF WEO Oct 2019, IMF Article IV Consultations Staff Report Aug 2019

#### **Economic Outlook and Risks**

Looking ahead, growth is expected to improve to 1.9 percent in 2020, supported by the ongoing increase in government spending. With strong macroeconomic framework in place the economic environment should be stable. The projections are for a small fiscal surplus, a 4 percent of GDP current account surplus, and for inflation to remain below the central bank's target.

However, in the medium term, the outlook remains subdued due to structural constraints—such as large involvement of the state in the economy, limited diversification, low investment, red tape, infrastructure bottlenecks, and population ageing—as well as the lingering effect of bilateral economic restrictions.

Debt risk is low. Large reserves, low debt, very low borrowing needs, strong and stable current account surpluses, the floating exchange rate and the fiscal rule help make the economy resilient to external shocks. The main risks include escalation of geopolitical tensions and a possibility of a step-up in bilateral economic restrictions—but even then, the economy is now in a better position to withstand such adverse events.