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Report No: 91351-AL

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF EUR 65.9 MILLION
(US$ 80 MILLION EQUIVALENT)

TO THE

REPUBLIC OF ALBANIA

FOR A

RESULTS-BASED ROAD MAINTENANCE AND SAFETY PROJECT

March 5, 2015

Transport and ICT Global Practice
EUROPE AND CENTRAL ASIA

CURRENCY EQUIVALENTS

(Exchange Rate Effective January 29, 2015)

Currency Unit		Currency Unit
EUR 1	=	ALL 139.80
US$ 1	=	ALL 123.59
US$1	=	EUR 0.88406

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AADT	Average Annual Daily Traffic
AIS	Accident Information System
ANTP	Albanian National Transport Plan
ARA	Albanian Road Authority
Bank	World Bank (IBRD)
BMS	Bridge Asset Management System
DLI	Disbursement-Linked Indicators
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECA	Europe and Central Asia
ECAPDEV	(Multi-Donor Programmatic Trust Fund) Europe and Central Asia Capacity Development
EIB	European Investment Bank
EIRR	Economic Internal Rate of Return
EMF	Environmental Management Framework
EMP	Environmental Management Plan
EU	European Union
EUR	Euro
FM	Financial Management
GDP	Gross Domestic Product
GoA	Government of Albania
HDM4	Highway Development and Management Model
Hybrid PBMC	Performance-based Maintenance Contract combining lump-sum and bills of quantity components
IBRD	International Bank for Reconstruction and Development
ICB	International Competitive Bidding
IEG	Independent Evaluation Group
IFC	International Finance Corporation
IFIs	International Financial Institutions
IFRs	Interim Financial Reports
IMF	International Monetary Fund
IMRSC	Inter-Ministerial Road Safety Council
IoT	Institute of Transport
IPA	Instrument for Pre-accession Assistance
IPF	Investment Project Financing
iRAP	International Road Assessment Program
IRI	International Roughness Index

LEK	Albanian Lek
LoS	Level of Service
LS	Lump Sum
MOI	Ministry of Interior
MOF	Ministry of Finance
MOTI	Ministry of Transport and Infrastructure
NPV	Net Present Value
NSDI	National Strategy for Development and Integration
P and PS	National roads classified as “Primary” and “Primary-Secondary”
PAD	Project Appraisal Document
PAP	Project Affected Peoples
PBC	Performance-based Contract
PBMC	Performance-based Maintenance Contract
PDO	Project Development Objective
PforR	Program for Results
PIP	Project Implementation Plan
PMT	Project Management Team
POM	Project Operating Manual
PSIA	Poverty and Social Impact Analysis
RAMS	Road Asset Management System
RAP	Resettlement Action Plan
RRMSP	Results based Road Maintenance and Safety Project
RS	Road Safety
SAA	Stabilization and Association Agreement
SEETO	South East Europe Transport Observatory
SLA	Service Level Agreement (as proposed between MOTI and ARA)
STS	Social Transparency System
TA	Technical Assistance
TOR	Terms of Reference
US$	United States Dollars
VAT	Value Added Tax
WB	The World Bank
WBIF	Western Balkan Investment Framework

Regional Vice President:	Laura Tuck
Country Director:	Ellen A. Goldstein
Senior Global Practice Director:	Pierre Guislain
Practice Manager:	Juan Gaviria
Task Team Leader:	Artan Guxho

COUNTRY
Albania

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PAD DATA SHEET

ALBANIA

Results-based Road Maintenance and Safety Project (P132982)

PROJECT APPRAISAL DOCUMENT

EUROPE AND CENTRAL ASIA

Report No.: PAD1112

Basic Information		
Project ID	EA Category	Team Leader
P132982	B - Partial Assessment	Artan Guxho
Lending Instrument	Fragile and/or Capacity Constraints [ ]	
Investment Project Financing	Financial Intermediaries [ ]	
	Series of Projects [ ]	
Project Implementation Start Date	Project Implementation End Date	
27-Mar-2015	30-Jun-2021	
Expected Effectiveness Date	Expected Closing Date	
28-Jun-2015	31-Dec-2021	
Joint IFC No		

Practice Manager/Manager	Senior Global Practice Director	Country Director	Regional Vice President
Juan Gaviria	Pierre Guislain	Ellen A. Goldstein	Laura Tuck

Borrower: Ministry of Finance			
Responsible Agency: Albanian Road Authority			
Contact:	Vladimir Bisha	Title:	Deputy Director
Telephone No.:	+355 (4) 223 4789	Email:	vladimir.bisha@arrsh.gov.al

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

Total Project Cost:	128.5	Total Bank Financing:	65.9
Financing Gap:	0.00		

Financing Source	**Amount**
Borrower	62.57
International Bank for Reconstruction and Development	65.90
Total	128.47

Expected Disbursements (in EUR Million)

Fiscal Year	2016	2017	2018	2019	2020	2021	0000	0000	0000	0000
Annual	17.05	12.64	16.60	12.64	6.97	0.00	0.00	0.00	0.00	0.00
Cumulative	17.05	29.69	46.29	58.93	65.9	0.00	0.00	0.00	0.00	0.00

Institutional Data

Practice Area / Cross Cutting Solution Area

Transport & ICT

Cross Cutting Areas

[ ] Climate Change

[ ] Fragile, Conflict & Violence

[X] Gender

[X] Jobs

[ ] Public Private Partnership

Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Transportation	Rural and Inter-Urban Roads and Highways	70		
Public Administration, Law, and Justice	Public administration-Transportation	30		
Total		100		

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

Themes

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Trade and integration	Regional integration	30
Rural development	Rural services and infrastructure	30
Public sector governance	Administrative and civil service reform	20
Financial and private sector development	Infrastructure services for private sector development	20
Total		100

Proposed Development Objective(s)
The objectives of the Project are to: (a) maintain the condition and improve the safety of the Borrower's Primary Road and Primary-Secondary Road networks, and (b) strengthen sustainable and efficient road asset management and safety practices, for the benefit of road-users.

Components	
Component Name	**Cost (EUR Millions)**
Component 1 - Maintenance Works and Monitoring	56.39
Component 2 - Institutional Reforms	2.92
Component 3 – Sector Reforms	3.95
Component 4 - Project Management and Audit	2.47
Front-End Fee	0.16

Systematic Operations Risk- Rating Tool (SORT)	
Risk Category	**Rating**
1. Political and Governance	Substantial
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Moderate
6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	Moderate
9. Other	
OVERALL	Moderate

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

Safeguard Policies Triggered by the Project	**Yes**	**No**
Environmental Assessment OP/BP 4.01	**X**	

Natural Habitats OP/BP 4.04	**X**	
Forests OP/BP 4.36		**X**
Pest Management OP 4.09		**X**
Physical Cultural Resources OP/BP 4.11		**X**
Indigenous Peoples OP/BP 4.10		**X**
Involuntary Resettlement OP/BP 4.12	**X**	
Safety of Dams OP/BP 4.37		**X**
Projects on International Waterways OP/BP 7.50		**X**
Projects in Disputed Areas OP/BP 7.60		**X**

Legal Covenants

Name	**Recurrent**	**Due Date**	**Frequency**
Technical Steering Committee	X	Dec. 28, 2015	

Description of Covenant

In order to implement Part 2 of the Project, the Borrower shall, not later than five months after the Effective Date, establish and thereafter maintain throughout the implementation of the Project, a Technical Steering Committee responsible for providing quality assurance on the technical aspects of road safety, with a composition and mandate satisfactory to the Bank.

Name	**Recurrent**	**Due Date**	**Frequency**
Social Transparency System	X		

Description of Covenant

The Borrower shall, through MOTI, ensure that ARA establishes, and thereafter maintains throughout implementation of the Project, the Social Transparency System to enable stakeholders in the transport sector to participate and provide feedback in the monitoring of the Project, under terms of reference in a manner acceptable to the Bank

Name	**Recurrent**	**Due Date**	**Frequency**
Mid-Term Review report		Oct. 28, 2018	

Description of Covenant

The Borrower shall, through MOTI, ensure that the ARA, not later than one month prior to the mid-term review furnishes to the Bank for comments, a report, in such detail as the Bank shall reasonably request, on the progress of the Project, and giving details of the various matters to be discussed at such review.

Name	**Recurrent**	**Due Date**	**Frequency**
Mid-Term Review		Nov. 28, 2018	

Description of Covenant

The Borrower shall, through MOTI, ensure that the ARA, not later than 40 months after the Effective Date, undertake in conjunction with all agencies involved in the Project, a comprehensive mid-term review of the Project.

Name	**Recurrent**	**Due Date**	**Frequency**

Disbursement Linked Indicators Audit	X		

Description of Covenant

The Borrower, through MOTI, shall ensure that ARA: (a) no later than three months prior to the end of each Year or by such later date as agreed with the Bank, carries out an independent DLI Audit and (b) no later than three months after the end of each Year, or by such later date as agreed with the Bank, furnishes to the Bank a complete DLI Audit Report satisfactory to the Bank.

Name	Recurrent	Due Date	Frequency
Technical Audit	X		

Description of Covenant

The Borrower, through MOTI, shall ensure that the ARA: (a) carries out, no later than three months prior to the end of each Year or by such later date as agreed with the Bank, an independent Technical Audit, and (b) Furnishes, no later than three months after the end of each Year, or by such later date as agreed with the Bank, a complete Technical Audit report satisfactory to the Bank.

Name	Recurrent	Due Date	Frequency
Borrower's Project Completion Report		Dec. 31, 2021	

Description of Covenant

For purposes of Section 5.08 (c) of the General Conditions, the Borrower shall through MOTI ensure that the ARA prepares the report on the execution of the Project and related plan required pursuant to that Section, and furnishes said report to the Bank not later than the Closing Date.

Conditions

Source Of Fund	Name	Type
IBRD	Project Operation Manual	Effectiveness

Description of Condition

The Borrower, through MOTI, has prepared and adopted a Project Operational Manual in a manner satisfactory to the Bank.

Team Composition

Bank Staff

Name	Title	Specialization	Unit
Rodrigo Archondo-Callao	Sr. Highway Engineer	Engineering and Economics	GTIDR
Fiona J. Collin	Sr. Transport. Spec.	Engineering and Road Maintenance	GTIDR
Moustafa Baher El-Hefnawy	Lead Transport Economist	Economics and Sector development	GTIDR
Steven Farji Weiss	ETC Consultant	Shared prosperity dimensions	GTIDR
Artan Guxho	Senior Infrastructure	Team Leader and Engineering	GTIDR

	Specialist		
Elda Hafizi	Program Assistant	Program Assistant	ECCAL
Bekim Imeri	Senior Social Development Specialist	Social Dimensions and safeguards oversight and compliance	GSURR
Jose C. Janeiro	Senior Finance Officer	Disbursement and Loans	CTRLA
Arben Maho	Procurement Specialist	Procurement oversight and compliance	GGODR
Esma Kreso	Senior Environmental Specialist	Environmental and safeguards oversight and compliance	GENDR
Marie Antoinette Laygo	Program Assistant	Project Processing	GTIDR
Elena Lungu	Consultant	Shared prosperity dimensions	GTIDR
Jonida Myftiu	Financial Management Specialist	Financial Management oversight and compliance	GGODR
Nargis Ryskulova	Operations Officer	Operations Guidance	GTIDR
Pedja Sovilj	Infrastructure Specialist (Consultant)	Institutional, sector and DLI mechanism support	GTIDR
Nightingale Rukuba-Ngaiza	Senior Counsel	Legal aspects	LEGLE
Vipasha Bansal	Associate Counsel	Legal aspects	LEGLE

Non-Bank Staff

Name	Title	City

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments

I. STRATEGIC CONTEXT

A. Country Context

1. **Until 2008, Albania sustained high rates of economic growth, averaging about 6.2 percent, and unemployment was steadily declining.** During this period, industry and construction grew at around 14-15 percent per annum, and were key drivers of economic expansion. Over the period 2002 to 2008, poverty rates fell from 25.4 to 12.8 percent. However, the global financial crisis in 2008 and the subsequent Eurozone crisis led to a significant slow-down. Albania avoided a recession, but between 2009 and 2013, average Gross Domestic Product (GDP) growth declined to less than 3 percent, and exports, employment rates and remittances were reduced. Weaknesses in public finance management resulted in accumulation of general government arrears of 5.2 percent of GDP in 2013 and public debt surged from 54.7 percent of GDP in 2008 to 70.2 in 2013.

2. **After 2008, as revenues declined and budgets for public investment were reduced, many public works, including those in the transport sector, continued at the same pace as initially planned, often by drawing on commercial loans**. In 2013, multiple new construction commitments and serious payment arrears drove up non-performing loans and adversely impacted the investment budget and private sector liquidity. The new coalition Government that assumed office in September 2013 acknowledged existence of the payment arrears, and has implemented a comprehensive arrears clearance strategy since January 2014.

3. **Albania applied for European Union (EU) membership in 2009 and became an official candidate for accession in June 2014**. This supports strong commitments in the transport sector established in June 2003, when Albania signed with the European Commission the Memorandum of Understanding for the Core Network creating the South East Europe Transport Observatory (SEETO)[1].

B. Sectoral and Institutional Context

4. **Roads and highways comprise the predominant mode of land transportation in Albania**, and provide essential links for freight and personal mobility. Roads are therefore important public assets, and their improvement and maintenance can bring significant benefit to communities by providing better access to social services, education facilities, markets and commercial hubs.

5. **The road network in Albania is a key asset in support of growth and job creation development initiatives**. Currently its management, financing and development faces three key challenges: (i) prioritization of new investments needs to be well aligned with macro and fiscal realities, (ii) clearance of arrears on a large number of contracts needs to be completed, and (iii) asset management and maintenance needs to be substantially improved. The Government of Albania (GoA) has recognized these challenges and the urgency to address them.

[1] The main aim of SEETO is "*to promote cooperation on the development of the main and ancillary infrastructure on the South East Europe Core Regional Transport Network and to promote and enhance local capacity."*

6. **Prioritization of new investments.** Prioritization of investments in the road sector is critical in order to ensure the sector's continued contribution to economic growth and shared prosperity and to ensure its sustainable maintenance and management. Progress has been made by the Government in developing a Medium Term Budget Plan (MTBP) 2015-17 that prioritizes new investments, a framework that is gradually more aligned with the budget realities in support of higher impact projects. However, this progress needs to be sustained and more efforts are needed to continuously improve the prioritization and feasibility processes. A thorough review of the investment plan and preparation of the MTBP 2015-17 has been done by Ministry of Transport and Infrastructure (MOTI) and Albania Road Authority (ARA) for the subject period, and this exercise will be carried out every year (covering the next three consecutive years) as part of the annual budget preparation process. In the overall sector context, the following urgent issues are now being addressed.

7. **Open Contracts**. First, GoA launched a large program of domestically-financed road construction during the period 2006 to 2010. Most of these road projects had been identified in Albania's National Transport Plan, initially prepared in 2004, and updated in 2010. However the budgeting process did not ensure that funding was committed to complete the ongoing projects. The situation was exacerbated by the 2008-2009 global financial crisis and by the end of 2013, ARA had about US$ 710 million worth of domestically financed, ongoing road investment projects, encompassing about 120 contracts with US$ 470 million of completed works, and commitments of US$ 240 million for incomplete works. The Government is now keenly committed to addressing this problem seeking support from the World Bank to develop a strategy for completing or abandoning projects (where the economic and social returns did not justify their completion) during the MTBP period 2015-2017. While the strategy is yet to be fully implemented, there is more transparency in the outcomes of the budgeting process. GoA is aiming to complete open contracts on a prioritized basis, and will seek legal advice in order to systematically address contractual issues.

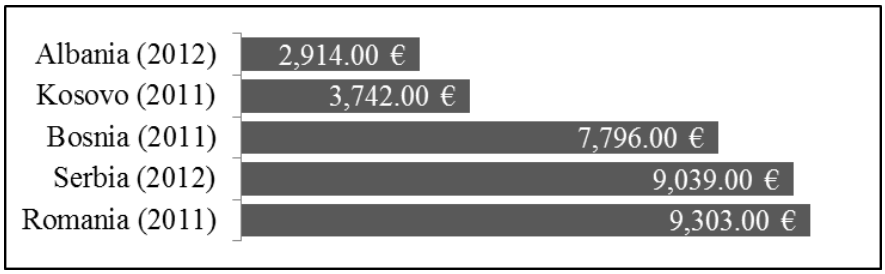
8. **Clearance of Arrears.** Secondly, GoA had accumulated LEK 70.7 billion in arrears as of December 2013, of which LEK 17.3 billion relate to capital investments, mostly in the road sector. Supported under a World Bank Development Policy Financing series and an International Monetary Fund (IMF) Extended Fund Facility, GoA has cleared LEK 25.9 billion arrears as of end July 2014, of which LEK 8.4 billion are related to capital investments. Information on all arrears is publicly available on the website of the Ministry of Finance (MOF). The World Bank and the IMF have also supported measures which have helped to significantly slow down accumulation of new arrears in 2014, although some new arrears have occurred in the roads sector. The aim is to clear the current stock of arrears by 2016, through parallel programs of fiscal consolidation. In parallel, GoA is committed to adopt transparent and objective investment prioritization analyses to achieve more efficient management of public finances.

9. **Sustainable Asset Management and Maintenance**. The third key area is the need for urgent attention to address road asset management and maintenance. Roads in Albania constitute one of the highest asset values, estimated at about US$6 billion, with substantial increases over the last decade. As such, the sector requires sufficient budget to sustainably manage and operate the road assets. Maintenance of the national road network, however, has been systematically underfunded until now, undermining the sustainability of the sector. A program to address the highest priority maintenance requirements of the 3,400 km of national roads needs to be funded and implemented, and the Results based Road Maintenance and Safety Project (RRMSP) will

support this need. The Project will address the maintenance needs of a substantial portion of the national roads network and will influence how maintenance is carried out by rolling out 5 year performance-based maintenance contracts along the most highly trafficked sections of this network. RRMSP will help provide certainty of financing during that period and will make the contractors accountable for the condition of the roads they are responsible for. In addition, the use of Project's disbursement linked indicators (DLIs) will incentivize GoA to adhere to the terms of the Loan Agreement and to the agreed sectoral reforms. While the Project only covers 1,335 km of the national network, it will also develop an asset preservation strategy for the entire network, and ensure that will remain in use after the Project completion.

10. **Increased traffic volumes, insufficient maintenance expenditures and capacity limitations, has increased the rate of deterioration of the network and costs to road-users**.[2] Recurrent expenditures averaged only 10 percent of total expenditures over the period 2007-2011. In 2010, the level of recurrent expenditure on the national road network amounted to some US$ 3 million, about 30 percent of what is estimated for routine and winter maintenance[3]. Albania spent an average of 2,914 Euros/km on the national road network in 2012, which is insufficient and low compared to other countries in the region.[4]

Table 1 - Expenditure on Maintenance per Km (Euros/km)[4]



11. **Within the transport sector, the primary emphasis has been on developing the national network, but these investments have not been adequately maintained**.[5] There is currently little regular monitoring of asset conditions, and even the overall length of the network is not entirely known[6]. Records of the road and structures inventory need to be updated and little information is collected on traffic volumes or axle loads. Such deficiencies impede the development of a professional approach to road asset management and financing. There have been, however, a number of positive developments; notably, ending the use of force account by contracting out all road maintenance operations, and piloting output and Performance-based maintenance contracts on national roads in two regions.

12. **Road safety remains a major social and public health issue in Albania.** Annual fatalities of 84.6 per 100,000 vehicles in 2012 compares unfavorably with comparator countries

[2] The shift towards a market economy -- after the democratic elections in 1992 -- unleashed rapid growth in car ownership and a concomitant need to develop transport infrastructure. At transition to democracy, the demand for private vehicles in Albania increased markedly, with the number of vehicles per 1,000 population, increasing from about 25 in 1989 to 118 in 2013. Source: World Bank (2013) http://data.worldbank.org/indicator/IS.VEH.NVEH.P3.
[3] Louis Berger (2010). *Op cit*.
[4] Maintenance rates in Serbia are set administratively and not through competitive tendering.
[5] World Bank Transport Unit, Sustainable Development (October 2011). ALBANIA: Improving the Quality and Planning of Road Maintenance and Construction Works.
[6] Louis Berger (2010), First Five Year Review of the Albanian National Transport Plan.

in the region (e.g.: Montenegro 41.3, Greece 13.8, Serbia 32.9) and more than ten times higher than some western European countries (Germany 7, France 8.5, UK 6.2)[7]. In response, GoA aims to reduce the number of fatalities by 50 percent in 2020, in comparison to 2009[8].

13. **GoA has increased its attention to road safety reforms**, including the adoption of the Road Safety Strategy and Action Plan in 2011; and adoption of mandatory Road Safety audit[9] for all new roads. More recently, GoA received a grant from the EU for Technical Assistance (TA) to focus on vehicle inspections and preparation of designs to rectify priority black spots. RRMSP will address some of the remaining road safety issues by strengthening the capacity of the Inter-Ministerial Road Safety Council (IMRSC), introducing road safety audit training accreditation courses, supporting media campaigns, and enhancing the Accident Information System.

14. **In recent years, several International Financial Institutions have supported road investments and reforms**. Two consecutive Bank-supported projects, the *Road Maintenance Project* and the *Transport Project* (which closed in 2007 and 2011), contributed to improvements in road network management, and supported modernization of maintenance by a transition from force account to direct contracting. A pilot across about 10 percent of the national road network, using output and performance-based road maintenance, was implemented successfully. In conjunction with physical works, capacity building was undertaken at the General Road Directorate (GRD[10]), which supported its transformation to the autonomous Albania Road Authority. The most recent Bank-supported *Secondary and Local Roads Project*, which resulted in highly satisfactory implementation as evaluated by the Independent Evaluation Group (IEG), set an example by preparing a US$ 368 million nation-wide program, financing only US$20 million and leveraging the balance from other development partners.

C. Higher Level Objectives to which the Project Contributes

15. **Current road sector priorities, within the draft National Strategy for Development and Integration (NSDI)** 2014-2020, include a strong focus on construction, rehabilitation and management of the national road network. The NSDI identifies *Sustained Growth through Efficient Use of Resources* and *improving infrastructure links in the regions* as strategic priorities, and aims to improve maintenance and safety of the road assets in line with EU standards and directives for implementing comprehensive road safety measures[11]. Under the RRMSP, private-sector contractors will provide periodic and routine maintenance functions under five-year contracts, and this results based approach is consistent with the Government's ongoing strategy to concession the operation and maintenance of a number of highways[12].

16. **MOTI is preparing a National Transport Sector Strategy for the five year period to 2020, which will define the development strategy for management of existing assets and new road investments**. The strategy is expected to provide a framework for a sector-wide

[7] World Health Organization 2013, "Global Status Report on Road Safety 2013: Supporting a Decade of Action".
[8] Government Decision No 125, 23 Feb 2011, on "Implementing Objectives for Improving Road Safety".
[9] By Amendment to Article 71/, introducing "Road Safety Audit" to the Highway Code. Decision 815 in Nov 2011.
[10] The predecessor of ARA.
[11] Road safety improvements through speed management, elimination of black spots and road safety awareness, as per EU Directives 2000/30/EU, 2010/47/EU and 2003/26/EU.
[12] Including Milot-Morine road with support from the International Finance Corporation. GoA is also planning to concession the maintenance of the Tirana – Elbasan and Tirana-Durres highways, and introduce tolling.

programmatic approach as an enabler for involvement of other development partners. However, while the groundwork is being laid for the sector-wide approach, there remains a pressing need to address road maintenance, which will be done under RRMSP, and which will include development of strategies that can be used to inform future road maintenance management and sector investments.

17. **RRMSP is also informed by the Albanian National Transport Plan until 2030 (ANTP2), which was adopted in 2010**. ANTP2 recommends that ARA initiates road maintenance activities through Performance-Based Contracts using a Road Asset Management System, along with formalizing a service agreement between ARA and MOTI.

18. **RRMSP will contribute to achieving the Bank's twin goals** to end extreme poverty and promote shared prosperity, by providing regional opportunities for sustainable sources of employment and income for the poor, especially in rural communities, where poverty is highest. Economic growth may be promoted through direct road maintenance expenditure and also by a multiplier effect in rural communities. In Albania there is a strong link between improvements in GDP and lifting people out of poverty (refer Annex 3, Figure 6). Unlike short-term road construction projects, the maintenance programs initiated under RRMSP are expected to create skills and long-term jobs, likely to last beyond the Project period. Well-maintained roads can also have a positive impact on the development of markets, agricultural productivity and more generally, on people's livelihoods. An improved road network will also facilitate access to social service facilities enhancing, particularly, outcomes in the health and education sectors. Finally, improvement in road safety is anticipated to have a positive distributional outcome. Males are the main victims of road traffic fatalities in Albania, and as they are also often the primary breadwinners within low-income households, there is a clear rationale for improving road safety.

19. **The Project is aligned with the Country Partnership Strategy (CPS)[13],** which acknowledges that Albania has steadily improved its transport infrastructure, but also recognizes the need for greater focus on maintenance. The CPS Progress Report 2013[14] confirmed the relevance of these priorities but focussed on reducing financial and energy sector vulnerabilities. RRMSP is aligned with the emerging directions of new Country Partnership Framework, which is under development, and reflects GoA's priorities regarding the need for better management of public investments, including road asset maintenance in the context of a sector-wide approach.

II. PROJECT DEVELOPMENT OBJECTIVES

A. Project Development Objectives (PDO)

20. The objectives of the Project are to: (a) maintain the condition and improve the safety of the Borrower's Primary[15] Road and Primary-Secondary[16] Road networks, and (b) strengthen sustainable and efficient road asset management and safety practices, for the benefit of road-users.

[13] The World Bank Group's CPS 2011 – 2014; approved by the Executive Directors on 15 July 2010.
[14] The World Bank Group's CPS Progress Report, approved by the Executive Directors on 24 April 2013.
[15] "Primary Roads" means Albania's highways and main road corridors.
[16] "Primary-Secondary Roads" means Albania's roads, other than Primary Roads, that connect major cities and tourist hubs, as well as lead to border crossings with neighboring countries, within Albania.

B. Project Beneficiaries

21. **The primary Project beneficiaries are all road-users.** Road-users are expected to benefit from improvements in road maintenance, through reduced travel times and vehicle operating costs and improved road safety. Road safety improvements will reduce both the social costs and the economic losses associated with road accidents. In 2013, there were 445,952 registered road vehicles in Albania; however, vehicle and accident data disaggregated by gender is not available.

22. **The secondary group of beneficiaries will include:** (i) ARA, which will receive assistance to improve road maintenance outcomes and capacity building in the areas of Performance-based Maintenance Contracting and road asset management processes; (ii) IMRSC, through improvements in road safety policy planning and development; and (iii) the local construction industry, both contractors and consultants, through expanded private sector opportunities to participate in road maintenance activities.

C. PDO Level Results Indicators

23. The achievement of the development objectives of the proposed Project will be measured through the following PDO level results indicators:

(i) Road Condition, as a function of the average International Roughness Index (IRI) of the Project network does not deteriorate (IRI measured as m/km / Maintenance);
(ii) Fatalities on an annual basis across the national road network (Y/N / Safety);
(iii) Preparation and implementation of fully-costed multi-year maintenance plans on an annual basis (Y/N / Sustainability).

24. **In addition to the PDO Level and Intermediate Indicators, the Project has been designed to link disbursements to defined results through DLIs**, which are broadly described below. The DLI framework, summary of protocols for monitoring the achievement of the DLIs, and DLI certifiable amounts are presented in Annex 1 (B).

DLI 1.1: ***Periodic Maintenance***. Targets will be met when a pre-defined length of periodic maintenance is completed.

DLI 1.2: ***Routine Maintenance***. Regular routine maintenance will be carried out under Performance-based Contracts on Project roads under five year maintenance contracts. Targets will be achieved if the pre-defined service targets of routine maintenance are achieved.

DLI 1.3: ***Social Transparency System***. Targets will be achieved if the system has been developed and operational to monitor feedback and prepare monthly trend and analysis reports.

DLI 2.1: ***IRAP Safety Surveys***. Targets will be met if the periodic surveys are completed showing an improvement in Safety Star rating across the Project roads.

DLI 2.2: ***Road Asset Management System*** – Targets will be achieved if there is evidence that annual condition surveys are completed and multi-year maintenance programs prepared on annual basis.

DLI 2.3: ***Service Level Agreement*** – Targets will be achieved when the Service Level Agreement between ARA and MOTI is signed/executed.

III. PROJECT DESCRIPTION

25. **The Project seeks to ensure that existing road network investments can be maintained and that road asset management and safety systems can be introduced sustainably**. Broadly, this will be implemented through: (i) maintaining the Project roads under 5-year hybrid Performance-based Maintenance Contracts; (ii) the provision of TA to improve road safety capacity at both ARA and the IMRSC; (iii) the provision of TA and institutional support to improve operating efficiencies within ARA, targeted at road asset management, and (iv) technical and advisory support to complete and develop sector strategies and programs. The Project has four components with a total investment of EUR 128.5 million (US$156 million equivalent), of which EUR 65.9 million will be financed by IBRD and EUR 62.6 million by GoA.

A. Project Components

Component 1 – Maintenance Works and Monitoring (Total EUR 114.67 million; IBRD EUR 56.39 million)

26. **The objective of this component is to provide periodic and routine maintenance of Project roads**. This is a DLI-based component, and financing is linked to the achievement of agreed disbursement linked indicators. This support will consist of two sub-components:

Sub-Component 1.A: Maintain the condition of 1,053 km of Primary (P) roads and 282 km of Primary-Secondary (PS) roads under hybrid[17] type Performance-based Maintenance Contracts.

Sub-Component 1.B: This component will finance a Monitoring Services Consultant. The primary role of the Monitoring Consultant is to ensure that the service levels defined in the maintenance contracts are complied with. The consultant will also provide an initial road safety audit, arrange for iRAP surveys, ensure that identified additional road safety black-spots and required safety enhancements are incorporated into the capital works, and develop the Social Transparency System (STS).

Component 2 – Institutional Reforms (Total EUR 5.93 million; IBRD EUR 2.92 million)

27. **The objective of this component is to support institutional reforms at both ARA and MOTI**, aimed at enhancing capacity in road safety and road asset management on a country level. This is a DLI-based component, and financing is linked to the accomplishment of agreed disbursement linked indicators. This support will consist of two sub-components:

Sub-Component 2.A: Operationalize road safety in ARA, MOTI and IMRSC, by strengthening organizational and policy-oriented actions, introducing Road Safety audit

[17] A hybrid contract is defined here as consisting of two components:- (a) works for periodic maintenance and improvements of the project roads and implemented through a Bill of Quantities or Lump Sum Design and Build approach, and (b) a Lump Sum routine maintenance component, paid on a monthly basis for the contract period.

training accreditation courses, supporting Road Safety media campaigns, and developing an integrated database to enhance the Accident Information System (AIS).

Sub-Component 2.B: Institutionalize Road Asset Management Systems (RAMS), by enhancing ARA's capacity to collect and analyze road data, conduct road condition surveys to collect input data for RAMS, and provide training to ARA staff to use the system to plan and budget for multi-year maintenance and investments expenditures.

Component 3 – Sector Reforms (Total EUR 4.74 million; IBRD EUR 3.95 million)

28. **The objective of this component is to support transport sector reforms**. Financing under this component will be based on standard Bank Investment Project Financing (IPF) disbursement procedures, and it will be fully financed out of the IBRD loan, with the Government financing only the Value Added Tax (VAT). The component will provide financing to address sector reforms, which would include, but not limited to, technical and advisory assistance to GoA to finalize the Transport Sector Strategy and associated implementation plan; and technical and analytical support for medium term budget planning.

Component 4 – Project Management and Audit (Total EUR 2.97 million; IBRD EUR 2.47 million)

29. Financing under this component will be based on standard Bank IPF disbursement procedures, and it will be fully financed out of the IBRD loan, with the Government financing only VAT. This support will consist of two sub-components:

Sub-Component 4.A: support project management functions of ARA's Project Management Team (PMT) and provide financing of the operating costs[18].
Sub-Component 4.B: carry out monitoring activities including the Beneficiary Impact Assessments, the Technical Audits and DLI Audits.

B. Project Costs and Financing

30. **The instrument choices considered included "Program for Results (PforR)", standard IPF and "Results-based IPF with DLIs".** PforR will be a more appropriate instrument once the Transport Sector Strategy, which is currently under preparation, is completed and a Road Sector Program is better defined. In this regard, RRMSP aims to provide technical support to assist GoA to develop capacity within MOTI and ARA to prepare such a program, covering both investment and maintenance of the National Road Network. Aligned with the Government's objectives to introduce a sector-wide approach, the sector strategy and road sector program will enable development partners and the Government to, collaboratively, participate in financing elements of this program, using a PforR-type of instrument.

31. **At this stage, the Bank and GoA selected as the more appropriate instrument a Results-based IPF with DLIs**, which also aligns well with the Government's preference to

[18] Operating costs means the reasonable incremental expenses arising under the Project, and consisting of salaries of the Project Management Team (excluding the salaries of Albania' civil servants) and expenditures associated with the implementation of Project activities, costs for office maintenance, per diems for staff, office furniture, materials and supplies, communication costs, advertising and fuel and transportation costs for field visits.

employ results-based financing for development assistance, rather than traditional investment lending. The DLI based components of the Project will be complemented by technical and capacity support components that will finance eligible expenditures in accordance with traditional IPF disbursement arrangements. The introduction of DLI-based financing further strengthens the Performance-based Contracting (PBC) approach being used under RRSMP for the maintenance of national roads network. It will also incentivize MOTI and ARA to implement institutional reforms for managing road assets, and shift the focus to results in delivering maintenance targets.

Table 2 - Project Cost and Financing (VAT inclusive)

Project Components	Project Cost (Euro M)	IBRD Financing (Euro M)	Percent Financing
1 Component 1 - Maintenance Works and Monitoring			
1A Maintenance Works			
1B Monitoring Services			
Sub-Total	*114.67*	*56.39*	*Up to 50%*
2 Component 2 - Institutional Reforms			
2A Operationalising Road Safety			
2B Road Asset Management			
Sub-Total	*5.93*	*2.92*	*Up to 50%*
3 Component 3 - Sector Reforms			
3A Sector Support for Reforms			
Sub-Total	*4.74*	*3.95*	*Up to 84%*
4 Component 4 - Project Management and Audit			
4A Support for Project Management			
4B Operating Costs			
4C Annual DLI and Technical Audits			
4D Completion and Impact Assessments			
Sub-Total	*2.97*	*2.47*	*Up to 84%*
Front-End Fee	*0.16*	*0.16*	
Total Financing Required (incl. VAT)	**128.47**	**65.90**	**51.29%**

32. **Withdrawals will be made through semi-annual loan advances** based on: (i) yearly rolling cash flow forecasts of Interim Financial Reports (IFRs), (ii) documentation of previous advances and (iii) for some advances, documentation of previous advances in parallel with the confirmation of the DLIs achievement. The use of six-month IFRs will allow for loan advances to provide regular and consistent levels of liquidity to implement Project activities.

33. Both the IFRs produced at the end of each second semester and the annual Independent DLI Audit reports, will be used to: (i) validate and certify achievement of DLIs, (ii) recognize expenditures incurred and reported as eligible, and (iii) convert prior advances into disbursements -- in part or in total, depending on whether the DLIs have been partially or completely achieved. Almost 90 percent of the Bank's Loan will use results-based disbursement based on DLIs, while the disbursement for the remaining 10 percent, covering sector support and project management will be based on standard IPF disbursement procedures. For Components 1 and 2, the Bank's funding is divided across the number of DLIs in a given percentage with 80

percent of the loan allocated to implementation of maintenance works and 20 percent allocated to road safety and asset management.

C. Lessons Learned and Reflected in the Project Design

34. **Re-balance capital investment and maintenance expenditures**. Experience documented in IEG evaluations of similar transport projects elsewhere indicates that low road maintenance expenditures adversely effects sustainability of road investments. A working RAMS in conjunction with modern PBC practices, may offer significant maintenance efficiency gains. RRMSP will adopt both the PBC approach and enhance RAMS. The RAMS will be used to analyse and cost maintenance strategies using multi-year programs developed on an annual basis, to ensure not only that maintenance planning is done, but an associated budget is provided.

35. **Service Level Agreement**. By passage of Law 10164 in October 2009, GRD was transformed into ARA, as a public autonomous entity, and a service provider to MOTI. This change gives MOTI and ARA joint responsibility for managing the national road network. The ARA Law stipulates that relationship and obligations of each organization should be defined through a Service Level Agreement (SLA). Although SLA preparation was financed by EU and strongly supported by the Bank and other developing partners, it has not yet been signed, thus, weakening ARA's ability of proper planning and budgeting for maintenance and in the same way the Government's and MOTI's position to make ARA accountable against agreed performance targets and service levels of the SLA. The signing /execution of the SLA is a DLI under the RRMSP.

36. **Improving Transparency and Beneficiary Feedback Loops**. Albania does not rank highly under the Corruption Perception Index[19] or the World Governance Indicator for Control of Corruption[20]. In Albania, public participation is not always observed, although from projects experience in other countries, it has been learnt that high levels of public participation and information dissemination provides greater transparency, and is a means to counter corruption. In this regard, RRMSP will provide financing to develop a Social Transparency System (STS), a feedback and grievance redress system, allowing road-users and the public to submit their feedback[21] on the Project, via sms, telephone and web interface. The STS web-site will also provide performance information and Project data to the public, to assist in transparency. Development and use of the STS will be a DLI.

37. **Focus on Reforms**. Drawing upon the experience of similar programs, such as the *Poland Road Maintenance and Rehabilitation Project* and *Serbia Road Rehabilitation and Safety Project*, the institutional strengthening components may encounter challenges, and so DLI's are being used to incentivize MOTI and ARA to focus on the reforms. As the pace of reform must be realistic and in accordance with the Government's strategic objectives, the Project DLIs have been designed to be both simple and achievable.

[19] Transparency International Corruption Perceptions Index rates countries from 0 to 100, where zero is the lowest rank. In 2013, Albania was ranked 116 out of 177 countries, with a Corruptions Perception Index of only 31.
[20] The World Governance Indictor, Control of Corruption, captures perceptions of how public power is exercised for private gain. Percentile ranks range from 0 to 100. In 2011 Albania's rank was 29, worsening to 27 in 2012.
[21] In this context feedback is defined as complaints, compliments, and requests for information and condition alerts.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

38. **MOTI will be responsible for Project oversight**. MOTI has overall responsibility for transport sector policies, designing strategies, developing sub-sectoral programs and budgets and performing regulatory functions. Because of the complexity in managing road safety, an Inter-ministerial Road Safety Committee (IMRSC), under the Chairmanship of the Prime Minister, was created in 2002. The Directorate of Traffic and Road Safety (part of MOTI) functions as the secretariat of the IMRSC.

39. **ARA will be responsible for implementing the project**. It is the national road network asset manager. ARA has a well-established track record in managing Bank-funded transport projects and it will implement RRMSP through a Project Management Team (PMT), partially staffed by its own personnel. As these staff also have their daily job responsibilities, the PMT will be enriched by consultants who will provide additional support in managing the Project, as well as procurement, financial, and safeguards functions. A budget for operating costs has been provisioned to support this arrangement.

40. **ARA, through its PMT, will be responsible for the delivery of TA to the secretariat of IMRSC for improving road safety outcomes**, under Component 2. To coordinate and oversee the Road Safety TA, a Technical Steering Committee will be established consisting of members of MOTI and ARA. The Technical Steering Committee will guide the finalization of the Terms of References (TOR) for the Road Safety technical assistance, and implement and monitor the progress of its activities. Issues and actions that go beyond the MOTI and Road and Traffic Safety Directorate mandate will be escalated to the IMRSC.

41. **Independent contract monitoring will be provided by consulting firms** engaged for the full term of the maintenance contracts. Primarily, they will administer the contracts, certify payments, and ensure compliance with the specified service levels. They will also arrange iRAP audits to monitor road safety improvements, addressing one of the results indicators. An additional role is to develop the STS and provide performance and network data inputs to the STS and feedback mechanisms. However, it will be ARA managing the STS, responding to public feedback, and preparing monthly trend reports. Use of the STS is a results indicator and a DLI.

42. **The Project will finance TA for annual Technical and DLI Audits**. After completion of the PBCs for maintenance, the TA will provide comprehensive completion and beneficiary impact assessments to: (i) document Project impacts on beneficiaries, including updating the baseline data collected in the PSIA[22] study; (ii) review lessons learnt, (iii) review trends within the STS and impact assessments; (iv) review the DLIs and results indicators; and (v) recommend improvements in Project design.

43. **Advances, Disbursements and Financial Management.** As explained earlier, disbursements for Components 1 and 2 are linked to agreed indicators (DLIs). They are: (i)

[22] PSIA Grant has been obtained for "*Road Safety and Poverty. Counting the Cost - Road Accidents and Impacts on Vulnerable Groups and the Bottom 40 percent*." This work is currently under preparation.

binary choice DLIs, i.e., DLIs linked to whether a certain measure is undertaken or not, and (ii) scalable DLIs, i.e., providing flexibility in disbursement to match -- slower or faster than annual targets -- implementation progress. Rolling advance loan proceeds will be utilized in order to facilitate the use of the results-based approach, given that the Borrower's budgetary processes and limited resources do not enable Government pre-financing and then disbursement by the Bank. The Bank will provide the first advance covering two semesters based on the yearly cash flow projections. The next advance will be after six months and will be based on both the expenditure reports for the first six months and an updated cash flow forecast for the following six months.

44. **Financial reports on program expenditures will be prepared**, along with updated cash flow forecasts and contract management information on a semi-annual basis and will be submitted to the Bank for review and acceptance. Loan advances will be converted into disbursements when expenditures reported are reviewed and accepted as eligible, and when the independent audit reports have validated and certified that DLI targets have been partially/fully-met, or exceeded. This conversion will occur at the time when audit results are produced, by the end of a given year, and upon the Bank's approval. Annex 3 describes in more detail how the conversion of advances to disbursement will function and how this will be treated in the event of faster or slower implementation progress with regard to the achievement of DLIs.

B. Results Monitoring and Evaluation

45. **Monitoring and Evaluation Arrangements.** Annex l (A) lists the main outcome indicators for the Project, the principal results indicators for each component as well as the DLIs. These will serve as the basis for monitoring. ARA through its Project Management team (PMT) and monitoring consultant will monitor and evaluate progress of the Project and will prepare Project Reports (see Annex 3 Section C including Figure 5). Indicators will be measured against the agreed targets and compared to defined baselines. Through the Project, technical assistance (TA) will be provided to undertake annual technical audits, DLI audits, and iRAP safety audits. Progress reports will include monitoring indicators and reporting on the implementation requirements set forth in the Environmental Management Plans and Resettlement Project Framework.

46. **DLI Audits.** Annual DLI Audits will be prepared by ARA through the PMT with the objective of: (i) certifying the extent to which the eligible Expenditures under the year covered by the audit have been incurred in compliance with the safeguards and procurement arrangements provided for in this Agreement and under the Project Operational Manual, and (ii) the DLIs for the year covered by the audit have been met. The DLIs are described in Annex 1 (B) and under the implementation arrangements in Annex 3 (including Figures 3 and 4).

47. **Technical Audits.** Annual technical and DLI audits will be procured through consultants. In general, the objective of the technical audits will be to review the planning, design, construction and management of the maintenance works. Although the audits will be done annually, not all sites (contracts) will be audited each time, but the audits will be planned progressively across the network, so as to ensure that each maintenance contract is reviewed at least twice across the Project implementation period. In doing the technical audit, ARA will seek to verify that the works and services purchased are being delivered as specified. The audits will extend to evaluating the appropriateness of the specifications and standards applied.

48. **Completion and Beneficiary Impact Assessment**. Prior to completion of the Project, but after completion of the maintenance contracts, TA will also be provided for a comprehensive completion assessment. The completion assessment will seek to: (i) document achievements and problems; (ii) review any lessons from the PBC, review any trends within the STS and impact assessments; (iii) review the DLIs and results indicators; (iv) recommend improvements in the Project documentation; and (v) design of an impact evaluation in close collaboration with the Albanian Development Fund (ADF) aimed at expanding analytical work already carried out in the context of the Secondary and Local Roads Project23; (vi piloting selected road safety interventions proposed by the Project's Poverty and Social Impact Analysis (PSIA)24 which consist of cost-effective policies and reforms focusing on the prevention and/or mitigation of road related injuries, specifically targeted at poor and vulnerable groups. Monitoring and evaluation of results will be the responsibility of the ARA and all technical inputs will be closely coordinated with the Bank and the ADF. All results will analyze the gender-specific impacts of the Project and evaluation and monitoring process will be gender-informed through STS and public consultations, as well as adequate disaggregation of data, where applicable.

49. **iRAP Safety Audits.** Periodic iRAP surveys will be conducted to monitor improvements on road safety (and to address one of the results indicators). The surveys will also identify any further hot-spots that need attention under emergency works (variations) in the following year of maintenance works implementation.

C. Sustainability

50. **This Project design is focused on implementing a sustainable and optimised solution to managing road assets in Albania**. Maintenance is aimed at continuance and preservation, and therefore promotes asset sustainability. A multi-pronged approach will be taken to assist in ensuring sustainability. This includes: (i) use of a Performance-based Maintenance Contracting (PBMC) approach to introduce a cost effective form of contracting aimed at preserving the Project road assets; (ii) enhancing RAMS and institutionalizing sound road asset management practices to enable ARA to collect, manage and analyse condition and traffic data across the entire network, which will be used to optimize road maintenance strategies and forecast road expenditures on an annual basis; (iii) use of STS, to help address public and community concerns about road maintenance and the adequacy of service levels, as well as to warrant ARA's accountability, beyond the Project completion date, to maintain the network at sustainable and acceptable levels; and (iv) preparing comprehensive completion and beneficiary impact assessments, to provide recommendations and assess lessons learnt, that make improvements in road management practices and can be used by ARA in the next round of road maintenance contracts.

[23] The first phase of an impact evaluation of secondary and local roads rehabilitation project began in 2012, using base-line and follow-up socio-economic surveys of households in project and non-project communities. The end line survey will be completed in 2015. The study provides a measure of significant causal project impact on income, employment, access to social services and socio-economic welfare of the beneficiaries. Results were disaggregated by gender, and implemented a difference-in-difference approach to compare treatment (project beneficiaries) and control (non-beneficiaries) groups.

[24] The Poverty and Social Impact Analysis assesses the distributional impacts of road fatalities and accidents on the poor, the bottom 40 percent, and other vulnerable groups in Albania. It is currently under preparation.

V. KEY RISKS

A. Overall Risk Rating and Explanation of Key Risks

51. **The overall Project risk at the time of appraisal is rated moderate**. Key risks relate to the Albania's fiscal situation, which is constraining GoA from fully financing the optimal maintenance program. In addition, the use of PBC across the national network will be challenging, given the limited experience of both ARA and the domestic contracting industry, with large-scale PBC operations. The use of DLIs within an IPF will be the first in Albania's transport sector, and whilst representing opportunities in terms of incentivising reforms, it may introduce some operational risks that will need to be closely managed and addressed.

Table 3 - Key Risks and Mitigation Measures

KEY RISKS	MITIGATION MEASURES
Political and Governance (Substantial)	
Although no corruption or fraud was found in other Bank-supported road projects, Albania does not rank highly in international corruption indexes. There is a risk of fraud and corruption due to high value Works contracts, vested interests and difficult economic conditions.	TA will support the PMT to monitor works, and provide technical and DLI audits. Use of the feedback and grievance redress website (STS) will allow increased transparency of Project processes and accountability of ARA, and provide feedback on contractors' performance.
Macroeconomic (Substantial)	
GoA has accumulated sizable arrears, limiting the fiscal space available for the additional borrowing which is necessary to implement the entire optimized road maintenance program. The optimal Project budget is about US$400 m across the National Road Network, but only a US$ 156 m (EUR 128.5 m equivalent) Project envelope is available.	Project scope has been reduced to cover high-volume roads only, and since its funding remains insufficient to optimize periodic maintenance, maintenance target standards have also been reduced. An HDM4 economic analysis has been done on the basis of the constrained budget envelope.
Fiduciary (Substantial)	
DLI's will be used for the first time in Albania's transport sector, creating a risk of misunderstandings and delays in disbursements. This could be exacerbated by using an overly ambitious and/or an unrealistic DLI framework, insufficient knowledge of Bank procurement guidelines, as well as procuring and managing PBCs	A simple and achievable DLI framework has been developed that complements the PDO indicators, and also provides incentives for specific reforms. Monitoring of DLIs will be assisted through TA audits. Strengthen the PMT procurement and contract administration capacities (training/workshops) and hiring additional and experienced individuals, along with detailed bidding documents and close implementation support from the Bank team

VI. APPRAISAL SUMMARY

A. Economic Analysis

52. **A Project Expenditure of EUR 128.47 million (US$ 156 million equivalent) (EUR 107.09, excluding VAT) is sufficient to keep the average network roughness of the P and PS networks at the same level as in 2014 (4.5 IRI, m/km), over the next five years**. However, to optimally eliminate the periodic maintenance backlog on the P and PS roads, a project budget of about EUR 329 million would be required, during the 2015-2019 period. The Highway Development and Management Model (HDM-4) was used to optimize the work program of preservation works for the Project's budget scenario and network coverage. For the four contracts to be financed under the Project, over a five year period, the evaluation shows that 28 percent of respective financing EUR 8.32 million, or US$ 10.1 million equivalent, should be allocated to pavement works on roads in poor condition and 61 percent (EUR 17.8 million, or US$ 21.6 million equivalent) to periodic maintenance works on roads in fair condition. Under this scenario: (i) the average network roughness of the P and PS networks, over five year period, will remain at the same level as in 2014; (ii) the present value of the capital preservation works costs over the evaluation period is EUR 35.5 million; (iii) the Net Present Value (NPV) is EUR 840 million; and (iv) the benefit cost ratio is 23.6. The return on the investments is highly satisfactory with an Economic Internal rate of Return (EIRR) of 135 percent, as expected for preservation works on high traffic roads. A sensitivity analysis shows that an increase of Project costs by 20 percent along with a decrease in benefits by 20 percent decreases EIRR to 109 percent. Annex 6 presents the economic evaluation results.

B. Technical

53. **The Project will develop and implement a cost effective planning that supports the safe operation of the national road network, and delivers maintenance to the Project roads at specified levels of service**. Road maintenance is the result of a number of operations and activities aimed at preserving the structural and functional features of the road network. The P and PS Project roads and their condition is summarised in Annex 2.

54. Road maintenance planning and management is a continuous activity and requires updated and focused information on asset inventory and condition. Data collection and analysis under the Project will be supported through TA to enhance and upgrade the RAMS, while periodic and routine maintenance activities will be implemented through area level contracts spanning the Project road network. Road safety aspects will be incorporated into the maintenance contracts by addressing already identified black-spots, as well as through a process of ongoing audits, whereby additional road safety issues can be identified, and then addressed by the contractors under contingency funding. In addition, TA will be implemented to support institutional reform and key operational programs at the IMRSC.

55. **Output and Performance-based (hybrid) Contracting (OPRC/PBC referred herein as PBC)** is a multi-year type of contract in which payment for a deliverable is explicitly linked to the Contractor successfully meeting or exceeding specific and clearly pre-defined levels of service (LoS) that are measured through a set of performance indicators. A PBC type approach has been chosen for this Project because it has the potential to offer cost savings and can be more effective in meeting the service levels that really matter to the road-user.

56. **Four PBC contracts will be used, averaging 350 km each, covering 1,335 km of the P and PS national roads**. The PBC contracts will carry out:

- Periodic maintenance, which under the Project will include improvements and rehabilitation to restore the structural integrity and riding quality of severely deteriorated road sections, mainly through intensive pavement repair and ancillary works. Improvements will also address unsafe road conditions.
- Routine maintenance, aimed at preserving the road assets to the defined LoS LoS will relate to aspects such as riding quality, comfort and safety, and will also include winter maintenance.
- Emergency works - to reinstate the roads after damage has occurred as a result of natural phenomena or accidents.

57. ARA's Road Construction and Design Standards are currently in draft form, and these standards will be adopted, where relevant, for the maintenance works. The Bank's Standard Bidding Documents for OPRC type contracts will also be used.

C. Financial Management (FM)

58. **ARA's finance sector will manage payments, accounting and reporting for RRMSP**. The head of the finance sector has provided similar functions in previous Bank supported operations, and therefore has the necessary experience and knowledge. However, an additional staff, experienced with Bank FM requirements, will be required due to the size of the Project.

59. **The Project has been designed to utilize the model of results-based disbursement, through the use of DLIs** (see Annex 3). The use of semi-annual IFRs will be used to report eligible expenditure. The annual financial statements covering the Project (both DLI-based components and non DLI-based components) will be subject to a financial audit. The audit will be contracted to a private audit firm and its reports will be submitted to the Bank not later than six months after the end of the subject fiscal year/period. The financial audit will not serve the purpose of assessing whether DLIs were achieved or not, and that aspect will be covered by the DLI audits.

D. Procurement

60. **The ARA PMT will be responsible for procurement functions**. The procurement risk assessment has identified the following risks: (i) insufficient experience on procuring and implementing PBCs; (ii) insufficient ARA's PMT capacities and knowledge on Bank procurement guidelines; and (iii) implementation delays and insufficient PBC experience of construction industry. The mitigation of the above key risks is detailed in Table 6. Additional support may be provided through experienced international consultants, financed under the operating costs. Detailed procurement risk mitigation measures are described in Annex 3.

61. **Procurement process under the Project will be carried out in accordance with World Bank "Guidelines**: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 revised in July 2014; and "Guidelines: Selection and Employment of Consultants under IBRD

Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 revised in July 2014, and the provisions stipulated in the Legal Agreement. The World Bank Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credit and Grants dated October 15, 2006 and revised on January 2011, will also apply. The Bank Standard Bidding Documents, including evaluation for procurement of works and goods will be used, and the Bank's Standard Request for Proposal for selection of consultants, including the standard evaluation report. A procurement plan covering the first 18 months of Project implementation is summarized in Annex 3.

E. Social (including Safeguards)

62. **The Project has a moderate risk from the social safeguards perspective,** given that the Project will primarily finance road maintenance and therefore remain largely within the existing right-of-way. Temporary and/or partial land acquisition, dislocation of kiosks or small street vendors, may be needed if additional site access is required through privately owned, or in-use, land plots. Partial and permanent land acquisition, and/or dislocation of street vendors, may be required if the horizontal road geometry is modified or widened in specific locations to allow for road safety or other improvement works. A Resettlement Policy Framework (RPF) has been prepared that addresses all possible impacts that can trigger Social Safeguards Operation Policies. The RPF was disclosed on December 1, 2014.

63. **An STS will be developed under RRMSP, which will function as a beneficiary feedback mechanism** (refer to Annex 3). Community consultations will be organized to discuss options for Road Safety (RS), and feedback from both the STS and RS improvement consultations will differentiate responses on gender basis. As the ARA will manage the STS and respond to beneficiary feedback, the system is expected to be sustainable beyond the Project period, and that it will form the basis for robust social accountability.

F. Environment (including Safeguards)

64. **RRMSP is a World Bank environmental "Category B" Project** triggering the safeguards policy on Environmental Assessment (OP/BP 4.01). Since the Project is focused on road maintenance, an Environmental Management Framework (EMF) document was prepared and disclosed in country in October 2014. The EMF harmonizes the environmental legislative requirements of Albania with the safeguards policies of the World Bank into one common approach. The EMF screening process will ensure that no additional World Bank safeguards policies are triggered and that no "Category A" works are financed by the Project. This approach was also used to prepare template Environmental Management Plans (EMPs) for two Project roads, with public consultations held in October 2014. The EMF and two EMPs have been finalized and were disclosed on December 1, 2014.

G. Grievance Redress Mechanisms

65. The Project may be faced with issues related to quality of work, safety, environmental and social issues, as well as complaints on contract awards. Ensuring the health and safety concerns of the road-workers and general public will be the responsibility of the contractors and will be managed through specific clauses in the contract agreement between ARA and the maintenance contractors. Monitoring of the contractors will be the responsibility of ARA. Complaints related to contract awards may be directed to Director General of ARA, or if

unsatisfied with that response, escalated to MOTI. Complaints regarding corruption matters may also be made directly to the Anti-corruption Commission. Works and consultancy services contracts will have documented mechanisms for mediation and dispute resolution, and must be dealt with in accordance the contract provisions.

Annex 1: Results Framework and Monitoring

Country: Albania

Project Name: Results-based Road Maintenance and Safety Project (P132982)

Annex 1 (A) Results Framework

Project Development Objectives

PDO Statement

The objectives of the Project are to: (a) maintain the condition and improve the safety of the Borrower's Primary Road and Primary-Secondary Road networks, and (b) strengthen sustainable and efficient road asset management and safety practices, for the benefit of road-users.

These results are at	Project Level

Project Development Objective Indicators

Indicator Name	Baseline	Cumulative Target Values									
		YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	End Target
Road Condition, as a function of the average IRI of the Project road network, does not deteriorate (IRI measured as m/km) (Text)	4.5	4.5	4.5	4.5	4.5	4.5					4.5
Fatalities on an annual basis across the National road network. (Number)	295.00	286.00	277.00	268.00	259.00	250.00					250.00
Preparation and implementation of fully-costed multi-year maintenance plans, on an annual basis (Yes/No)	No	Yes	Yes	Yes	Yes	Yes					Yes

Intermediate Results Indicators

Indicator Name	Baseline	Cumulative Target Values									
		YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	End Target
Length of Project roads under routine maintenance through Performance-based Contracts (Kilometers)	0.00	1,335.00	1,335.00	1,335.00	1,335.00	1,335.00					1,335.00
STS being used to monitor feedback trends, with issues being closed out and monthly reports being prepared. (Yes/No)	No	STS developed	STS operational for the entire year	STS operational for the entire year	STS operational for the entire year	STS operational for the entire year					Yes
iRAP surveys completed showing an improvement in Safety Star ratings across the Project roads. (Text)	TBC - Star Rating from First Year Survey			A better value than the original Star Rating							A better value than the original Star Rating
Length of national road network for which condition survey data obtained and entered into RMS database. (Kilometers)	0.00	850.00	1600.00	2450.00	3400.00	3400.00					3400.00
Road Safety Media Campaign developed and in use. (Yes/No)	No	No	No	Yes	Yes	Yes					Yes
Accident Information Database enhanced and in use by end of Year 2 (Yes/No)	No	No	Yes	Yes	Yes	Yes					Yes
Finalize Beneficiary Impact Assessments and Completion Reports (Yes/No)	No	No	No	No	No	No	Yes				Yes
Preparation of Transport Sector Strategy (Yes/No)	No	No	No	Yes	Yes	Yes	Yes				Yes

Indicator Description

Project Development Objective Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Road Condition, as a function of the average IRI of the Project road network, does not deteriorate (IRI measured as m/km)	Based on HDM4 analyses, the average IRI should not deteriorate. This analysis of IRI will be confirmed by measurements of the Project roads.	Annually	Estimated from Project Preparation Maintenance Strategy Report.	ARA through the Monitoring Consultant
Fatalities on an annual basis across the National road network are decreased.	Annual fatalities using the official Albanian statistics (which does not include fatalities that subsequently occur after hospitalization)	Annually	MOTI Annual Road Safety Report	IMRSC
Preparation and implementation of fully-costed multi-year maintenance plans, on an annual basis	This is a measure of the sustainability of the process and outcome of maintenance activities being institutionalized under the Project.	Annually	ARA	ARA

Intermediate Results Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Length of Project roads under routine maintenance through Performance-based Contracts	Performance-based Maintenance Contracts will be awarded for five-year periods, which will include a routine maintenance component covering the Project roads.	Annual review of progress.	Contract records which will be provided through the Monitoring Consultants to ARA, to be confirmed by annual technical audits and DLI audits.	ARA through Technical Assistance.
STS being used to monitor feedback trends, with issues closed out and monthly reports being prepared.	Within the Monthly Feedback and Trend Reports, information will be disaggregated by gender and other socio-economic criteria)	Monthly	ARA through the STS	ARA
iRAP surveys completed showing an improvement in Safety Star ratings across the Project roads.	An iRAP safety Star survey will be done across all Project roads - initially to obtain baseline data, then at mid-Project and again prior to Project completion.	Baseline, Mid-Project, Project completion.	Base-line from first year annual iRAP survey of Project roads.	ARA through TA under Monitoring Consultant

Length of national road network for which condition survey data obtained and entered into RMS database.	Condition data to be surveyed on an annual basis	Data collected continuously, but indicator to be reviewed annually.	ARA road database.	ARA, initially with technical assistance.
Road Safety Media Campaign developed and in use.	Media campaigns will be developed and be in use to communicate key safety messages to the public.	Annual review of progress.	ARA through IMRSC, under Technical Assistance for Component 2	ARA through IMRSC
Accident Information Database enhanced and in use by end of Year 2	ARA will procure Technical Assistance who will work with key stakeholders including IMRSC, MOTI and Traffic Police, to develop a comprehensive, digitally based, Road Accident Database.	Annual review of progress	ARA through IMRSC, under TA for Component 2	ARA through IMRSC
Finalize Beneficiary Impact Assessments and Completion Reports	To ensure that a full assessment of the strengths and weakness of the Project is made prior to Project completion, including lessons-learnt.	Once, just prior to Project completion.	ARA Records	ARA through Technical Assistance.
Preparation of Transport Sector Strategy	As part of sector reforms, GoA has committed to preparing a Transport Sector Strategy	Once	MOTI	MOTI

Annex 1 (B) Disbursement Linked Indicators

Disbursement Linked Indicators (DLIs), presented below, are proposed as a way to align the Project outcomes and reforms with project expenditures. The proposed DLIs will be applied against Components 1 and 2 only. There are no DLI targets associated with expenditures under Component 3 and 4.

DLI Targets		**Year 1** To Dec 31, 16	**Year 2** To Dec 31, 17	**Year 3** To Dec 31, 18	**Year 4** To Dec 31, 19	**Year 5** To Dec 31, 20	**Total proportion of Loan amount (EUR million)**	**Evidence to be submitted to the Bank**
1.1 Length of roads where periodic maintenance completed	Percentage of Project Roads where periodic maintenance completed	28% from a baseline of 0%	22% in addition to target achieved in Year 1	22% in addition to target achieved in Years 1 and 2	22% in addition to target achieved in Years 1-3	6% in addition to target achieved in Years 1-4		DLI Audit Report for each respective Year
	Proportion of Loan amount (expressed in EUR million)	7.48	5.87	5.87	5.87	1.60	26.69	
1.2 Routine maintenance targets achieved	Percentage of the aggregate contract amount of the HRMPBCs paid in each respective Year	On average at least 80%	On average at least 80%	On average at least 80%	On average at least 80%	On average at least 80%		

	Proportion of Loan amount (expressed in EUR million)	5.33	3.56	3.56	3.56	1.78	17.79	
1.3 Social Transparency System developed and operational	STS is developed and operational (as set forth in the Project Operational Manual)	STS Developed	STS Operational for entire Year	STS Operational for entire Year	STS Operational for entire Year	STS Operational for entire Year		DLI Audit Report for each respective Year
	Proportion of Loan amount (expressed in EUR million)	0.375	0.74	0.74	0.74	0.375	2.97	
2.1 Completion of periodic IRAP Surveys	Periodic IRAP Surveys completed showing Star Ratings	IRAP Survey completed and baseline Star Rating established	N/A	IRAP Survey completed and Star Rating higher than baseline Star Rating achieved	N/A	IRAP Survey completed and Star Rating higher than baseline Star Rating achieved		
	Proportion of Loan amount (expressed in EUR million)	0.99	-	0.99	-	0.99	2.97	DLI Audit Report for each respective Year

2.2 RAMS established and operational	Annual condition survey completed under the terms of reference specified in the Project Operational Manual and multi-year maintenance program prepared as per Part 2(b)(ii) and (iii) respectively of the Project	Yes	Yes	Yes	Yes	Yes		
	Proportion of Loan amount (expressed in EUR million)	1.186	1.186	1.186	1.186	1.186	5.93	
2.3 Service Level Agreement signed	Service Level Agreement signed	N/A	N/A	Signed	N/A	N/A		
	Proportion of Loan amount (expressed in EUR million)	-	-	2.96	-	-	2.96	
PROPORTION OF LOAN AMOUNTS FOR EACH DLI PER YEAR		**15.36**	**11.36**	**15.31**	**11.36**	**5.93**	**TOTAL: 59.31**	

Annex 1 (B)

Table 4: Summary of Protocols for Monitoring the Achievement of DLIs

The table below summarizes the protocols to be used in determining DLI values, and should be read in conjunction with the sample DLI calculations that follow.

	DLI	DLI Criteria	Protocol to Evaluate Compliance of the DLI
1.1	Length of Periodic Maintenance Completed	The percentage of total Periodic Maintenance should reach 100% by the end of the Project. That is, the length of roads actually competed compared with the length of roads included in the Bidding Documents (% of total km). Capped at 100%.	*Means of Verification*: ARA will provide reports from the Monitoring Consultant summarizing progress across each of the Maintenance Contracts, supported by Interim Payment Certificates. *Procedures:* The Annual DLI Audit will confirm the percentage achievement that can be multiplied by the value of the DLI amount[25]. The overall value certified at the annual DLI will consider the value of the cumulative verification at the time of the audit, less the cumulative value of the verification at the previous annual DLI Audit or baseline value.
1.2	Routine Maintenance targets achieved	Under each of the Works contracts, Routine Maintenance is paid on a Lump Sum (LS) basis on a monthly basis. Under the terms of the Works contracts however, the LS amount may be reduced if the Maintenance Service Levels are not fully met. This DLI recognizes that even if 100% of the monthly routine maintenance payments are not made, that routine maintenance is still being performed. Hence, where an amount of 80% or more, on average of the annual Routine Maintenance LS contract amounts has been paid to the Contractors, over the preceding DLI period[26] than 100% of the DLI can be certified as achieved. If less than 80%, on average, of the annual contract LS amount is paid for routine maintenance to the Maintenance Contractors, then	*Means of Verification*: ARA will provide Reports from the Monitoring Consultant summarizing progress across each of the Maintenance Contracts, supported by Interim Payment Certificates. *Procedures:* a. The Annual DLI Audit will confirm the percentage achievement that can be multiplied by the value of the DLI Amount. The DLI measure is "Percentage of the aggregate contract amount of the HRMPBCs paid in each respective Year"; based the target average at least 80%")

[25] "DLI Amount" means the value linked to fully achieving the DLI targets, as shown in Table 10.
[26] "DLI period" means the period of time since commencement, or since the previous annual DLI audit.

		only that % of the DLI will be certified.	
1.3	STS in use.	Upon completion of development of the STS, ARA should ensure that it is regularly monitored and updated, and that on a monthly basis trend reports are prepared summarizing the types of issues raised during the preceding month and how those issues were addressed and/or closed out. In addition, the web interface should be kept updated with Contactors performance achievements. If monthly analysis and trend reports are being provided, and Contractors performance achievements are updated monthly on the web-site, then the DLI can be certified for each month it is being properly used and maintained.	*Means of Verification.* ARA will provide evidence of preparation of monthly STS reports (using a format to be agreed during Project implementation, based on the STS development process). The STS shall be in developed and in use within Year 1, so the period over which this DLI shall apply will be 48 months. Therefore, for each month that the STS is certified as in use, a percentage equivalent to 1/48, shall be multiplied by the DLI Amount (Table 10). *Procedures:* The Annual DLI Audit will confirm the "percentage achievement" that can be multiplied by the value of the DLI Amount. The overall value certified at the annual DLI will consider the value of the cumulative verification at the time of the audit, less the cumulative value of the verification at the previous annual DLI Audit or baseline value.
2.1	iRAP Surveys show improvement across the Project roads	The target is for improvements in the Star-Ratings over the Project years. This is a "Yes/No" DLI, with surveys done mid-Project and in the final year, compared to a base-line survey done in the first year. Either the DLI is certified completely or not. If a baseline survey is done, then one third of the total DLI amount can be certified. For the two remaining surveys, at the time of each DLI audit, the Star-Rating achieved is compared with baseline, and if an improvement is made over the base-line, then the interim DLI is certified. The aim is to achieve overall, an improvement by the end of the Project, and for this to be certified at the final DLI audit.	*Means of Verification.* ARA will provide evidence of the results of the baseline and each subsequent iRAP Survey. The iRAP Survey will be managed by the Monitoring Consultant who will provide the iRAP Survey Report to ARA. The baseline survey shall be completed in Year 1. *Procedures:* The annual DLI audit will verify that the baseline survey has been done within the required time period. When this is verified, then 1/3 of the amount of the DLI (Table 10) can be certified. Upon completion of the mid-term and final iRAP audit, and verification as part of the subsequent annual DLI audit, that the Star-Rating has improved since the baseline survey, and then the remaining

			DLI value can be certified.
2.2	Annual condition surveys on National network and multi-year rolling program	The target is for multi-year, costed rolling maintenance programs to be prepared annually, signifying that the use of RAMS is understood and being entrenched in the institution, and therefore becoming a sustainable function. By Year 5 condition survey data should be obtained for the entire network. This is a "Yes/No" DLI reviewed annually. At the time of each DLI audit, an assessment is made as to whether the use of RAMS, as indicated by the production of the maintenance programs, has been achieved. If it has been achieved, then the DLI is certified. The aim is to achieve competent use of RAMS and the ability to competently perform maintenance strategy analyses using the system, which would be recognized by the production of annual, costed maintenance plans by ARA, by the end of Year 5, and for this to be certified by the final DLI audit.	*Means of Verification.* ARA will provide evidence of the production of each annual multi-year costed maintenance program, (in a format to be agreed during implementation). It is recognized that population of the database with condition and network data will be completed progressively; however the annual multi-year programs can nevertheless be completed using the available information. These activities will be supported by a consultant under Component 2, who will assist ARA to analyze the available information and prepare the annual maintenance program. *Procedures* The annual DLI audit will verify whether or not an annual maintenance program that complies with the agreed format, developed by TA, has been prepared. When this is verified, then 1/5 of the amount of the DLI (Table 10) can be certified, for each annual program prepared.
2.3	Service Level Agreement between MOTI and ARA	The target is for the Service Level Agreement to be signed between MOTI and ARA, and for all obligations of each party to be clearly established.	*Means of Verification.* Evidence will be provided by ARA in the form of a copy of an agreement that has been signed/executed between the parties. *Procedures* This is a "Yes/No" DLI. At the time of each DLI audit, if the Service Agreement has been formally agreed and adopted, then the DLI is certified. The aim is to achieve agreement and adoption of the Service Agreement by the end of Year 5 (or earlier), and for this to be fully certified at or before the final DLI audit.

Annex 1 (B)
Table 5: DLIs and the Corresponding DLI Certifiable Amounts

	Disbursement Estimates	%	Total EUR m
80% (of total of Component 1&2)			
Component 1 - Maintenance Works and Monitoring (Disbursement thru DLIs)			
1.1	Length of roads where Periodic Maintenance Completed	45	26.70
1.2	Routine Maintenance Targets Achieved	30	17.79
1.3	STS developed and operational	5	2.97
20% (of total of Component 1 & 2)			
Component 2 - Institutional Reforms (Disbursement thru DLIs)			
2.1	Completion of iRAP Surveys	5	2.97
2.2	Annual condition surveys on National network and multi-year rolling program	10	5.93
2.3	Service Agreement (between MoTI and ARA)	5	2.97
	Sub-Total Estimated Disbursements for DLI Components		*59.31*
Component 3 - Sector Reforms (No DLI's)			3.95
Component 4 -Project Management (No DLI's)			2.47
Sub-Total Estimated Disbursements for non-DLI Components			*6.43*
Front End Fee			0.16
	Total		65.90

Annex 1 (B) DLI Sample Calculations

DLI 1.1 Percentage of Periodic Maintenance Completed

The total length of roads that will receive periodic maintenance is estimated as 554 km. It is anticipated that this will be done over four and a half years. At the time of each interim DLI Audit, the cumulative total for all years up to the date of the audit will be compared with the overall total, to determine if the target value has been achieved. However, it is expected that 100% of the periodic maintenance will be achieved over the life of the Project.

DLI 1.1	**Length of roads where Periodic Maintenance Completed**
Criteria: The percentage of project Roads where periodic maintenance is completed by the end of the project. That is, the length of roads actually completed compared with the length of roads included in the Bidding Documents (% of total km). Capped at 100%.	

Total Value of DLI: ($ million)	€ 26.69

Sample DLI Calculation

Year #	**Cumulative Percentage of Completed Periodic Maintenance**	**Calculation per year**	**DLI Amount** ($million)	**Cumulative Certified DLI Amount** ($million)
1	28% of planned periodic maintenance certified complete	=28% x DLI Value	€ 7.47	€ 7.47
2	50% of planned periodic maintenance certified complete	=50% x (Cumulative DLI Value) less value of previous certifications.	€ 5.87	€ 13.34
5	100% of planned periodic maintenance certified complete	=100% x (Cumulative DLI Value) less value of previous certifications.	€ 13.34	€ 26.69

As 100% of this target was met in Year 3, it is now fully certified.	
Potential Amount that may not be disbursed to the Borrower under this DLI is:	€ 0.00

DLI 1.2 Routine Maintenance

A primary focus of the Project is regular routine maintenance under Performance-based Contracts (PBC) of all Project roads under five year maintenance contracts. Under PBC, the Contractor is only paid if levels of service are achieved, although some deductions may be made to address reduced service levels. To reflect this inherent variability, but also to recognize that even if all service levels are not being consistently met that maintenance activities are ongoing, this DLI will be met if, on average across all maintenance contracts, 80% of the Contract Lump Sum is paid to the Contractor. In this event, then 100% of the DLI value is certified. If less than 80% of the average Contract Lump Sum is paid to the contractor, then only that percentage of the DLI will be certified.

DLI 1.2	**Routine Maintenance Targets Achieved**			
Criteria: Percentage of the aggregate amount of Routine Maintenance certified, across all Hyrbid Road Maintenance Performance Based Contracts.				
Estimated progression of DLI Value: ($million)			**DLI Amount** (Eur million)	**Cumulative Certified DLI Amount** (Eur million)
Yr 1	on average at least 80%		€ 5.34	€ 5.34
Yr 2	on average at least 80%		€ 3.56	€ 8.90
Yr 3	on average at least 80%		€ 3.56	€ 12.46
Yr 4	on average at least 80%		€ 3.56	€ 16.01
Yr 5	on average at least 80%		€ 1.78	€ 17.79
Yr 6			€ 0.00	€ 17.79
Total Value of DLI: ($ million)			€ 17.79	

Sample DLI Calculation				
Year #	**Overall average of Routine Maintenance Payments**	**Calculation**	**DLI Amount** (Eur million)	**Cumulative Certified DLI Amount** (Eur million)
1	An average of 60% of LS certified in Yr 1	=60% x Yr 1 DLI Value	€ 3.20	€ 3.20
2	An average of 75% of LS certified Yr 2	=75% x Yr 2 DLI Value	€ 3.47	€ 6.67
3	An average of 79% of LS certified in Yr 3	=79% x Yr 3 DLI Value	€ 3.17	€ 9.84
4	An average of 82% of LS certified in Yr 4	=100% x Yr 4 DLI Value	€ 6.17	€ 16.01
5	An average of 85% of LS certified in Yr 5	=100% x Yr 5 DLI Value	€ 0.00	€ 16.01
6	An average of 91% of LS certified cin Yr 6	=100% x Yr 6 DLI Value	€ 1.78	€ 17.79

Potential Amount that may not be disbursed to the Borrower under this DLI is:	$0.00

DLI 1.3 Social Transparency System – Development

This is a yes/No DLI. If the system has been developed and is in use for the required duration, then 100% of this DLI can be certified.

DLI 1.3	**STS Being Developed and Operational**
Criteria: STS developed and operatinal as set forth in the POM (at least monthly). Issues being addressed and closed–out. If monthly analysis and trend reports are being provided, and Contractors performance standards are updated monthly on the web-site, then the DLI can be certified for each month it is being properly used and maintained.	

Estimated progression of DLI Value: ($million)			
Year 1	STS developed		€ 0.37
Year 2	STS operational for the entire		€ 0.74
Year 3	STS operational for the entire		€ 0.74
Year 4	STS operational for the entire		€ 0.74
Year 5	STS operational for the entire		€ 0.37
Year 6			€ 0.00
Total Value of DLI: (Eur million)			€ 2.97

Sample DLI Calculation

Year #	**Usage of the STS**	**Calculation**	**DLI Amount** (Eur million)	**Cumulative Certified DLI Amount** (Eur million)
1	System Being developed		€ 0.00	€ 0.00
2	In use 6 of 12 months	= 50% x DLI Value	€ 0.37	€ 0.37
3	In use 12 of 12 months	= 100% x DLI Value	€ 0.74	€ 1.11
4	In use 6 of 12 months	= 50% x DLI Value	€ 0.37	€ 1.48
5	In use 9 of 12 months	= 75% x DLI Value	€ 0.28	€ 1.76
6	In use 12 of 12 months	= 100% x DLI Value	€ 0.00	€ 1.76

Potential Amount that may not be disbursed to the Borrower under this DLI is:	€ 1.20

DLI 2.1 IRAP Surveys show Safety improvements across the Project roads.

This is a Yes/No DLI, with surveys done in mid-project and in the final year.

DLI 2.1	**Completion of iRAP Surveys**
Criteria: Periodic iRAP surveys completed showing improvements in the star-ratings over the project years. This is a "Yes/No" DLI, with surveys done mid-project and in the final year, compared to a base-line survey done in Year 1. Either the DLI is certified completely or not. If a baseline survey is done, then one third of the total DLI amount can be certified. For the two remaining surveys, at the time of each DLI audit, the star-rating achieved is compared with baseline, and if an improvement is made over the base-line, then the interim DLI is certified. The aim is to achieve an overall improvement by the end of the project, and for this to be certified at the final DLI audit.	

Estimated progression of DLI Value: ($million)			**DLI Amount** (Eur million)	**Cumulative Certified DLI Amt** (Eur million)
Year 1	iRAP survey completed and baseline established		€ 0.99	€ 0.99
Year 2	N/A		€ 0.00	€ 0.99
Year 3	Rating higher than baseline star rating		€ 0.99	€ 1.98
Year 4	N/A		€ 0.00	€ 1.98
Year 5	Rating higher than baseline star rating		€ 0.99	€ 2.97
Year 6			€ 0.00	€ 2.97
Total Value of DLI: (Eur million)			€ 2.97	

Sample DLI Calculation

Year #	**Survey**	**Calculation**	**DLI Amount** (EUR million)	**Cumulative Certified DLI Amt** (EUR million)
1	Baseline Survey completed and established as 2 star	=100% x Year 1 DLI Value	€ 0.99	€ 0.99
3	2 star (ie no improvement over baseline)	= 0% x Year 3 DLI Value	€ 0.00	€ 0.99
6	4 star (ie improvement over base-line)	=100% x (Cumulative Year 1, 2 and 3 DLI Value) less value of previous certifications	€ 1.98	€ 2.97
Potential Amount that may not be disbursed to the Borrower under this DLI is:				€ 0.00

DLI 2.2 Annual condition surveys done and multi-year rolling program prepared covering the National road network.

This is a Yes/No DLI for the preparation of multi-annual and fully-costed maintenance programs prepared on annual basis.

DLI 2.2	**RAMS established and operational**
Criteria: The target is for multi-year, costed rolling maintenance programs to be prepared annually, signifying that the use of RAMS is understood and being entrenched in the institution, and therefore becoming a sustainable function. By Year 6 condition survey data should be obtained for the entire network. This is a "Yes/No" DLI reviewed annually. At the time of each DLI audit, an assessment is made as to whether the use of RAMS, as indicated by the production of the maintenance programs, has been achieved. If it has been achieved, then the DLI is certified. The aim is to achieve competent use of RAMS and the ability to competently perform maintenance strategy analyses using the system, which would be recognized by the production of annual, costed maintenance plans by ARA.	

Estimated progression of DLI Value: ($million)			**DLI Amount** (Eur million)	**Cumulative Certified DLI Amt** (Eur million)
Year 1			€ 1.19	€ 1.19
Year 2			€ 1.19	€ 2.37
Year 3			€ 1.19	€ 3.56
Year 4			€ 1.19	€ 4.74
Year 5			€ 1.19	€ 5.93
Year 6			€ 0.00	€ 5.93
Total Value of DLI: (Eur million)			€ 5.93	

Sample DLI Calculation

Year #	**Programs Prepared**	**Calculation**	**DLI Amt** (Eur million)	**Cumulative Certified DLI Amount** (Eur million)
1	System start-up only		€ 1.19	€ 1.19
2	Year 2 survey done but no program	= 0% x DLI Value	€ 1.19	€ 2.37
3	Year 2 and 3 surveys done and Yr 3 program	= 100% x DLI Value	€ 1.19	€ 3.56
4	Yrs 2, 3 survey done but not Yr 4, nor Yr 4 program.	= 0% x DLI Value	€ 0.00	€ 3.56
5	Years 2, 3, 4 & 5 surveys done and all programs	= 100% x DLI Value	€ 1.19	€ 4.74
6	Years 2, 3, 4, 5 & 6 surveys done and all programs	= 100% x DLI Value	€ 0.00	€ 4.74

Potential Amount that may not be disbursed to the Borrower under this DLI is:	€ 1.19

DLI 2.3 Service Level Agreement drafted and signed/executed. Y or N

The ARA Law stipulated that the relationship between ARA and the oversight Ministry would be defined through a Service Level Agreement "specifying obligations related to funds, planning, progress and reporting". ARA's main duties include (a) meeting the obligations of the Road Code; (b) providing for the safety of road-users in all its activities; (c) developing and maintaining management systems for the national roads and bridges; (d) assisting in annual updates of the ANTP; (e) assisting in the five year review of the ANTP in cooperation with the Institute of Transport; and (f) preparing mid-term development programs and annual work programs for construction, reconstruction, maintenance, preservation and development of the national road network in accordance to national strategy.

As a first step, there must be a clear understanding of the size of the network that ARA is expected to manage. Likewise, the responsibility for the balance of the network should be clearly defined. The concept of a Service Agreement between the Ministry and the ARA binds both organizations and makes them jointly responsible for the road network. This agreement requires that the Ministry has its own staff to oversee the preparation of the Service Agreement and to monitor and evaluate ARA's performance. In general, they will be responsible for managing the Service Agreement for the Ministry and the Government of Albania.

Many of the duties of ARA under the Law creating it are addressed under the Project, which is why this DLI is being adopted, in order to incentivise the formalisations of these reforms.

DLI 2.3	**Service Agreement (between MoTI and ARA)**
Criteria: The target is for the Service Agreement to be made binding between MoTI and ARA, and for all obligations of each party to be clearly established. This is a "Yes/No" DLI. At the time of each DLI audit, if the Service Agreement has been formally agreed and adopted, then the DLI is certified. The aim is to achieve agreement and adoption of the Service Agreement by the end of Year 5 (or earlier), and for this to be fully certified at or before the final DLI audit.	

Total Value of DLI: (Eur million)	€ 2.96

Sample DLI Calculation

Year #	**Status of Service Agreement**	**Calculation**	**DLI Amount** (Eur million)	**Cumulative Certified DLI Amt** (Eur million)
1	No	= 0% x DLI Value	€ 0.00	€ 0.00
2	No	= 0% x DLI Value	€ 0.00	€ 0.00
3	No	= 0% x DLI Value	€ 0.00	€ 0.00
4	Yes	= 100% x DLI Value	€ 2.96	€ 2.96

As this is a Y/N target, and it was met in Year 4, it is now fully certified.	
Potential Amount that may not be disbursed to the Borrower under this DLI is:	€ 0.00

Annex 2: Detailed Project Description

ALBANIA: Results-based Road Maintenance and Safety Project

A. CONTEXT

Box 1 – Why Is Road Maintenance Needed? [27]

> Transport infrastructure is an essential requirement for economic growth, job creation and poverty reduction since transport contributes to the value of nearly all goods and services. Improvements in transport infrastructure also reduce the costs of transportation and improve its quality. This in turn improves economic performance by making goods and services more competitive and by stimulating growth in trade.
>
> Roads and highways comprise the predominant mode of land transportation, and provide essential links for freight and personal mobility. Roads are therefore important public assets, and their improvement and maintenance can bring significant benefit to communities by providing better access to social services, education facilities, markets and commercial hubs.
>
> Improvements and maintenance lead to greater comfort, speed, and safety to users and, of course, lower vehicle operating costs which translate into reduced transport costs. The benefits derived from roads can be sustained if their improvements are followed by well-planned maintenance. The lack of maintenance leads to rapid road deterioration slowing down the realization of expected benefits from road improvements. Although there is general recognition of the importance of maintenance, (in Albania, in common with many countries), it is still not adequately financed nor implemented.

Snapshot of the Albanian Road Network

1. The overall length of the road network in Albania totals about 15,000 km. The network comprises 3,400 km[28] of national roads administered by the Ministry of Transport and Infrastructure (MOTI) and directly managed by the Albanian Road Authority (ARA). The local road network consists of: (i) 4,411 km of district roads, which provide rural links of district importance and are maintained by district road departments within the Regional Road Authorities under the Ministry of Interior (MOI); (ii) 4,980 km of communal roads, including private access roads, which provide rural links of communal importance and are maintained by road departments of the 309 communes; and (iii) 2,500 km of urban or municipal roads, which are maintained by the road departments of the 65 Municipalities.

[27] World Bank, Guide for Technical Audit of Road Works, 2012

[28] Another 600 km of regional roads rehabilitated from the Albania Development Fund have been, recently, transferred to ARA.

Project Scope

2. The focus of this Project is on Performance-based Maintenance and safety improvements to high volume roads within the national network. The Project roads comprise that part of the National road network, classified as primary (P) and Primary-Secondary (PS). The Project will maintain 1,053 km of P roads, and 282 km of PS roads. The roads to be maintained are identified on a *Location Map* in Annex 6, and summarized in Tables 7 below.

Table 6 - Contract Packages, Contracts Costs and Performance, List of Project Roads

	Network Length (km)				Pavement Capital Works	
Contract	P	PS	S	Total	(km)	(%)
A	216	73	0	289	139	48%
B	242	58	0	300	119	40%
C	282	94	0	376	103	27%
D	314	57	0	371	193	52%
Total	1,053	282	0	1,335	554	41%

Contract	Restoration Road Works*	Capital Preservation Works	Routine Maintenance	Repair of Bridges	Emergency Maintenance	Total
A (Eur M)	2.6	6.6	7.9	0.7	2.2	20.1
B (Eur M)	1.9	6.8	8.3	0.9	1.6	19.5
C (Eur M)	1.8	5.4	9.1	0.9	1.2	18.5
D (Eur M)	1.6	9.7	9.4	0.9	1.8	23.4
Total	7.9	28.5	34.6	3.5	7.0	81.5

* restoration road works are non-pavement rehabilitation road works

	Roughness (IRI)		NPV	EIRR
Contract	2014	2019	(M EUR)	(%)
A	5.0	5.0	90	85%
B	4.8	5.7	214	95%
C	3.6	4.1	135	168%
D	4.2	3.5	401	177%
Total	4.3	4.5	840	135%

Contract no.	**Region** (N=North C=Center S=South)	**Network**	**Road ID**	**Road Name**
A-B	C	P	SH1-N	1_Tiranë - Hani i Hotit (new)
B	C	P	SH2	2_Tiranë - Durrës (autostrada)
C	C	P	SH3	3_Elbassan - Kapshticë
B	C	P	A3	A3_Tirane -

Contract no.	Region (N=North C=Center S=South)	Network	Road ID	Road Name
				Elbasan (new Motorway)
C	C	P	SH4-N	4_Durrës - Fier (NEW)
D	S	P	SH4-O	4_Tepelene-Kakavijë (old)
D	C	P	SH4-N	4_Levan-Tepelen (NEW)
A	N	P	SH5	5_Shkodër - Kukës
B	N	P	SH6	6_Milot - Skuraj - Peshkopi
C	C	P	SH7	7_Elbasan - Rrogozhinë
D	S	P	SH8	8_Fier - Vlorë
D	S	P	SH8	8_Pusi Mesinit-Sarandë
D	S	P	A2	A2_Levan - Vlore (new part of SH8)
C	S	P	SH9	9_Qafë Thanë - Doganë
B	N	SP	SH32	32_Lezhë - Shëngjin - Kune
A	N	SP	SH41	41_Ura e Bunës - Muriqan
B	N	SP	SH44	44_K/Rr.Nr.6 - Dogana Blladë
B	C	SP	SH52	52_Vorë - K/Rinas - F.Krujë
B	C	SP	SH60	60_Kryqëzim Rinas - Rinas - Qafe Kashar
C	S	SP	SH64	64_Pogradec - Tushemisht
C	S	SP	SH72	72_Lushnje - Berat - Çorovodë
D	C	P	SH85	85_K/Shkozet - Plepa
D	S	SP	SH97	97_Ura e Kranesë - Konispol (Q.Botë)
D	S	SP	SH99	99_Sarandë (Ura e Gajdarit)-K/Qafë Muzinë
A	N	SP	208	Segmenti Tamarë -

Contract no.	Region (N=North C=Center S=South)	Network	Road ID	Road Name
				Vermosh
A	N	S	22	22_Qafë Mali - Qafë Morinë
A	N	S	28	28_Melgushë (K/Rr.Nr.1) - Mjedë
B	C	S	218	Maminas-Hamallaj-ShenPjeter

3. The unconstrained cost, to optimally eliminate the periodic maintenance backlog on Primary and Primary-Secondary National Roads at levels which would prevent further deterioration, was estimated at US$400 million (EUR 329.5 million equivalent) over a five-year period, and that is beyond the available budget envelope. The scope of the Project was therefore reduced to cover the P and PS roads only, and the level of periodic maintenance optimized to match the lower budget, over a five year period. Should additional funding become available during the Project life, then consideration can be given to expanding the Project scope, or developing a new project to address the remaining national road network.

4. In addition to the road maintenance activities, technical assistance will be provided to promote institutional reforms. Technical Assistance will be provided in two broad areas: Road Safety and Road Asset Management.

5. A Results-based Investment Project Financing (IPF) is to be used to encourage results and sector reforms, and the Project will have Disbursement Linked Indicators (DLI's). The model is described in more details in Annex 3.

Road Maintenance under the Project

6. The primary purpose of this Project is to develop and implement cost effective planning that supports the safe operation of the road and delivers maintenance to the required levels of service. Road maintenance is the result of a number of operations and activities aimed at preserving the structural and functional features of the road network. Under the Project, four PBC contracts will be used, averaging 350 km each, covering 1,335 km of the Primary (P) and Primary-Secondary (PS) national roads. The PBC contracts will include:

- Periodic maintenance, which under the Project, will include improvements and rehabilitation to restore the structural integrity and riding quality of severely deteriorated road sections, mainly through intensive pavement repair and ancillary works. Improvements will also address unsafe road conditions.
- Routine maintenance, aimed at preserving the road assets to the defined level of service (LoS). LoS will relate to aspects such as riding quality, comfort and safety, and will also include winter maintenance.

- Emergency works - to reinstate the roads after damage has occurred as a result of natural phenomena or accidents.

7. The Output and Performance-based (hybrid) Contracting approach (OPRC/PBC referred herein as PBC)[29] is a multiyear type of contract in which payment for a deliverable is explicitly linked to the Contractor successfully meeting or exceeding certain clearly pre-defined level of service (LOS) measured through a pre-defined set of performance indicators. A PBC approach has been chosen for this Project because it has the potential to offer cost savings and can be more effective in meeting the service levels that really matter to the road-user. PBC allows the road agency to focus upon the key outcomes that it wishes to achieve while transferring the responsibility for the delivery of the outcomes to the Contractor, affording the Contractor greater flexibility in selecting methods, materials, and quantities, as long as pre-defined performance indicators are met. Contrary to conventional contracts, which rely on a bill of quantities with unit costs to define payments to the Contractor, the focus of PBC is the standard of the final output.

Road Safety under the Project

8. Improving road safety has taken on great importance in Albania because of the high social and economic costs resulting from road accidents. Progress has been made, but much remains to be done. Due to the large increase in since the early 1990's, the improvement and extension of the paved road network throughout the country, and the larger number of young and inexperienced drivers, the accident rate has increased substantially.

9. Road safety is a major social and public health issue in Albania**.** Annual fatalities of 84.7 per 100,000 vehicles in 2012 compares unfavorably with other countries in the region (Montenegro 41.3, Greece 13.8, Serbia 32.9) and more than ten times higher than some western European countries (Germany 7, France 8.5, UK 6.2)[30]. In response, GoA aims to reduce the number of fatalities by in 2020 by 50 per cent in comparison to 2009[31].

10. Road safety aspects will be incorporated into the maintenance contracts through addressing black-spots identified under an initial road safety audit, and through a process of ongoing audits, whereby additional road safety issues can be identified, and then addressed by the contractors under emergency / contingency funding. In addition, TA will be implemented to support institutional reform and key operational programs at the IMRSC.

Road Asset Management under the Project

11. Road maintenance planning and management is an on-going activity which requires current and accurate information on asset inventory and condition. Data collection and analysis under the Project will be supported through TA to update the RAMS.

[29] PBC involves a significant shift away from more traditional approaches to the delivery and maintenance of road infrastructure and associated services.
[30] World Health Organization 2013, "Global Status Report on Road Safety 2013: Supporting a Decade of Action"
[31] Government Decision No 125, 23 Feb 2011, on n "Implementation of Objectives for Improving Road Safety".

B. Project Development Objectives (PDO)

12. The objectives of the project are to: (a) maintain the condition and improve the safety of the Borrower's Primary Road and Primary-Secondary Road networks, and (b) strengthen sustainable and efficient road asset management and safety practices, for the benefit of road-users.

C. Project Components

Component 1 – Maintenance Works and Monitoring (Total EUR 114.67 million of which IBRD EUR 56.39 million)

13. **Sub-Component 1.A**: This component will finance routine and periodic maintenance of all Project roads, under hybrid[32] type road maintenance PBCs. The Project roads comprise 1,053 km of Primary (P) roads and 282 km of Primary-Secondary (PS) roads. This is a DLI based component, and financing is linked to the accomplishment of agreed DLIs.

14. The periodic maintenance and ancillary works will be pre-defined and consist of simple activities to strengthen the pavement and improve the ride (roughness) characteristics. It is expected that this will largely consist of a minimum thickness of asphalt (40 – 80 mm), along with improvements to the drainage system (i.e., repairs to side drains, outlet drains and cross-culverts). Other improvements to be addressed will include measures to stabilize batters and side slopes (i.e., to prevent or repair land-slides in either the cut faces or embankments), and simple road safety measures (line-marking, guard-rail, guide-posts and other types of road furniture). In addition, as part of the improvement works to be specified, the Project will address priority road safety black-spots, to be identified under an initial independent road safety audit commissioned under the maintenance contracts.

15. **Sub-Component 1.B**: Technical assistance for Monitoring Services for the maintenance activities will also be provided under this component. Monitoring services will provide an initial road safety audit and ensure that any identified road safety black-spots are incorporated into the improvement works. In general, the role of the Monitoring Consultants is to administer the works contracts, monitor that the Contractors are achieving the service levels defined in the maintenance contracts, calculate any penalties that may be applicable if service levels are not being met and certify payments. Periodic iRAP safety audits will be conducted to monitor improvements on road safety. The surveys will also assist to identify any further black-spots that need attention under emergency works (variations) in the following year of maintenance works implementation.

[32] A hybrid contract is defined as consisting of two components:- (a) works for periodic maintenance and improvement of the road and implemented through a Bill of Quantities or Lump Sum Design and Build approach, and (b) a lump sum routine maintenance component, paid on a monthly basis for the contract period.

Component 2 – Institutional Reforms (Total EUR 5.93 million of which IBRD EUR 2.92 million)

16. The objective of this component is to support institutional reforms at both ARA and MOTI, aimed at enhancing capacity in road safety and road asset management on a country level. This is a DLI based component, and financing is linked to the accomplishment of agreed DLIs

17. To complement the physical works, support is to be provided for institutional reforms at ARA, MOTI and IMRSC, aimed at further enhancing capacity in road safety and road asset management and accountability. This support will consist of two sub-components:

18. **Sub-Component 2.A:** Operationalizing Road Safety in ARA and MOTI (IMRSC). In 2009, SweRoad prepared a comprehensive review of Road Safety in Albania. A number of documents were produced, including a National Road Safety Strategy for 2011 – 2019 and a Road Safety Action Plan with actions prioritised by importance and urgency. Activities proposed under this sub-component will follow-up and provide technical assistance to enable Government to implement various actions identified in the Action Plan that focus on strengthening the capacity and operations of the IMRSC and MOTI.

19. The main activities under Sub-Component 2A will include:

(a) Operationalize road safety:
- Organization and policy oriented actions at IMRSC and MOTI;
- Strengthen the Secretariat of the IMRSC;
- Strengthen the road safety technical expertise within IMRSC, MOTI and ARA;
- Prepare and introduce national standards and guidelines for traffic management signs and markings based on the Vienna Convention.

(b) Providing systems that will allow for annual road safety audits including:
- Development of a sustainable training course that can be adopted by a suitable organisation (eg University of Tirana or Institute of Transport), including a robust program for testing and certification of Road Safety Auditors;
- Mandatory road safety audits for all new roads, using qualified Road Safety Auditors.
- Harmonize (where needed) Albanian legal requirements for road safety audits with EU procedures.

(c) Provision of expertise and materials for development of road safety programs and campaigns:
- Design and implement both short and long-term term campaigns using a variety of media;
- Develop programmes to improve the safety of non-motorised road-users (pedestrians, cyclists);
- Monitor and evaluate the results of the campaigns to improve them.

(d) Development of an integrated database linking road accident information and other relevant traffic information:
   - The database will allow for input and access to various organisations (eg MOI, Traffic Police, MOTI, ARA and Institute of Transport), and maybe be linked to ITS collection systems developed as part of the RAMS database.
   - The AIS will be capable of disaggregating data by gender and other socio-economic parameters.

20. **Sub-Component 2.B:** Institutionalizing Road Asset Management Systems, aimed at enhancing ARA's capacity to plan, collect, store and analyse road asset management data. ARA has an existing road asset management system, which was established in 2005. Some network data has been entered into the database, but it is incomplete and the populated data is not current. It is proposed that the Project will update the road asset management system, provide systems to ensure that condition and traffic data is collected and input, provide training to ARA personnel on how to use the data to prepare multi-year and fully-costed, maintenance programs on an annual basis, and in general, to ensure sustainability and usability of the system.

Component 3 – Sector Reforms (Total EUR 4.74 million of which IBRD EUR 3.95 million)

21. The objective of this component is to support sector reforms and Project implementation. Disbursements under this component are not linked to achievement of DLIs. The component will provide financing to address sector reforms, which would include, but not limited to, technical and advisory assistance to GoA to finalize the Transport Sector Strategy and associated implementation plan; and technical and analytical support for medium term budget planning.

Component 4 – Project Management and Audit (Total EUR 2.97 million of which IBRD EUR 2.47 million)

22. To provide assistance to MOTI and ARA in implementing the Project, financing will be provided (**Sub-Component 4.A**) to support the project management functions of the Project Management Team (PMT) and provide financing for the operating costs; and (**Sub-Component 4.B**) to carry out monitoring activities including Beneficiary Impact assessments and annual DLI and Technical audits.

23. Project Management support will include financing for ad-hoc technical assistance through individual consultants to support the PMT, envisaged to include, but not limited to, consultants to provide technical support and assist the PMT with project and procurement management, contracts management, ITC management, safeguards management and financial management. The operating costs will support ad-hoc technical assistance and the day-to-day operations of the PMT, and may include the preparation of the annual financial audits, cost of communications, translations, meetings, local travel, consumables and day-to-day office maintenance and administration.

24. Annual DLI Audits will be procured through consultants, and maybe the same consultants engaged for the annual technical audit. The objective of the DLI audit will be to review whether or not the Project's DLIs are being met. The DLI process and the proposed indicators are described in Annex 1 (B) and Annex 3.

25. Annual technical audits will be procured through consultants. In general, the objective of the technical audits will be to review the planning, design, construction and management of the maintenance works. Although the audits will be done annually, not all sites (contracts) will be audited each time, but the audits will be planned progressively across the network, so as to ensure that each maintenance contract is reviewed at least twice across the Project implementation period. In doing the technical audit, ARA will seek to verify that the works and services purchased are being delivered as specified. The audits will extend to evaluating the appropriateness of the specifications and standards applied. A typical Terms of Reference for Technical Audit of Roads Programs/Projects is available. [33]

26. Prior to completion of the Project, but after completion of the maintenance contracts, TA will also be finance for a comprehensive completion and beneficiary impact assessment. These assessments will seek to: (a) document achievements and problems (b) review and document lessons learnt (c) document Project impacts on beneficiaries; (d) re-visit the PSIA[34] study; (e) review trends within the STS and impact assessments; (f) review the DLIs and results indicators; and (g) recommend improvements in Project design.

[33] Refer to Annex 1, World Bank, *Guide for Technical Audit of Roads Works*. 2012

[34] PSIA Grant has been obtained for "*Road Safety and Poverty. Counting the Cost - Road Accidents and Impacts on Vulnerable Groups and the Bottom 40 percent*." This work is currently under preparation

Annex 3: Implementation Arrangements

ALBANIA: Results-based Road Maintenance and Safety Project

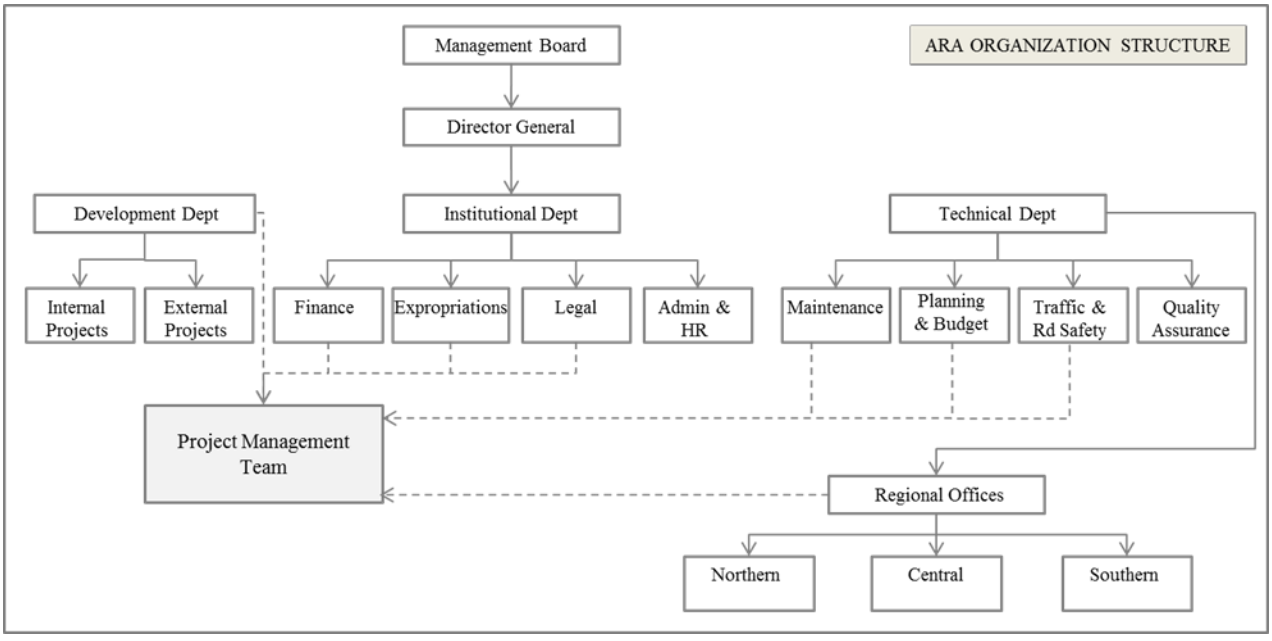
A. Project Institutional Arrangements

1. Overall responsibility of initiating policy and coordination of transport infrastructure and services development at national level is vested in the Ministry of Transport (MOTI). The Ministry of Transport and Infrastructure (MOTI) has overall oversight of transport, setting sector policies, developing sub-sectoral budgetary and performing regulatory functions.

2. The Albanian Road Authority (ARA) - created by Law No. 10164 October 2009 - is the asset manager of the national road network, and responsible for the construction, upgrading, rehabilitation, and maintenance of the national road network including associated planning, budgeting, and programming. ARA is accountable to MOTI, and has responsibility for road infrastructure management of the national road network. The key role players in the development and management of road infrastructure in Albania are presented below.

3. ARA is overseen by the ARA Management Board, which consists of seven members: four are governmental representatives from the Ministries of transport, finance, economy, local government, and three representative private sector organizations. The overall staff size of ARA is about 100 staff and the organization structure is shown below:

Figure 1 – ARA Organization

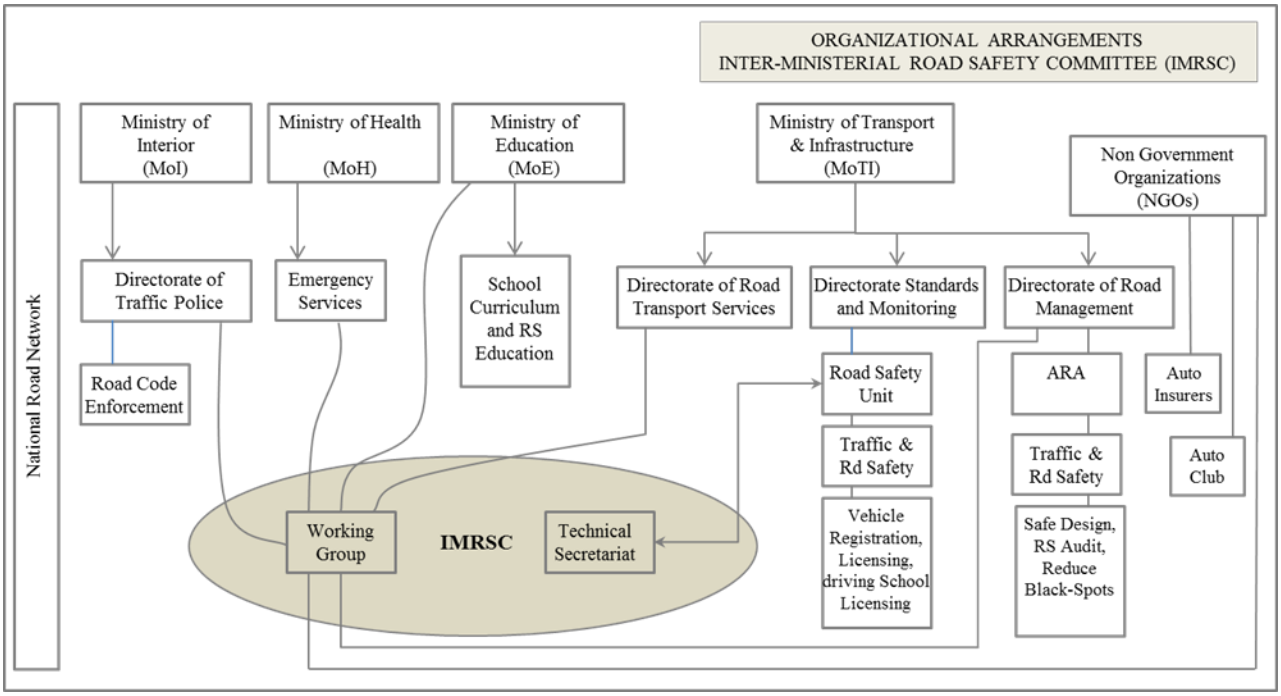


4. Several ministries play a role in various aspects of road safety, including MOTI, MOI, Ministry of Health and Ministry of Education.

- MOTI's role includes: an oversight of the planning, design and construction of the national road network through the ARA; administrative oversight of the Road Code and periodically recommending updates to it; oversight of the processes for vehicle registration, vehicle inspections and driver licensing.
- The Ministry of Interior (MOI) is responsible for the daily enforcement of the Road Code and regulations regarding the operation of vehicles largely through the Directorate of Traffic Police.
- The Ministry of Health (MOH) is responsible for emergency medical services and for oversight of hospital care for victims of road accidents.
- The Ministry of Education and Science (MOES) is responsible for informing young students of road safety issues through its road safety curriculum.

5. Besides these national institutions, local and municipal governments have certain responsibilities over enforcement and managing road safety within their jurisdiction. Civil society organizations and the insurance industry also have roles to play in road safety. Because of the complexity in managing road safety, the Inter-ministerial Road Safety Committee (IMRSC) was created in 2002. IMRSC is under the Chairmanship of the Prime Minister and consists of eight members. The Directorate of Traffic and Road Safety (part of MOTI) effectively functions as the unofficial secretariat of the Committee. The organisational arrangements of the IMRSC are shown below:

Figure 2 – IMRSC Organization



Domestic Construction Industry:

6. A review was undertaken of the capacity of domestic contractors, which determined that the Albanian maintenance contractors possess the following positive characteristics:

(a) Can mobilize in a timely manner to site
(b) Possess a good knowledge of the network and its history of interventions
(c) Have a relatively good level of responsiveness for ad- measure type works
(d) Are responsive and sensitive to the Public and Clients needs in emergency situations
(e) Have a pro-active approach towards amicable resolution of dispute.

7. However, based on past performance, some shortcomings were also identified:

(a) In general there is a poor understanding of the performance-based contract concept
(b) There is a lack of management within their internal supervision teams
(c) Inability to organize satisfactory inspection teams to monitor road conditions
(d) Inability to consistently meet the levels of service required
(e) Poor workmanship

8. Taking this situation into account, the contracting strategy is aiming to achieve equilibrium between the benefits of utilizing domestic resources through local contractors on the one hand, and the benefits of attracting international contracting expertise, who are likely to have higher levels of technical knowledge, efficiency, management expertise and organizational capacity. It is anticipated that this equilibrium will be obtained by setting the size of each of the PBC contracts at a level that will attract international contractors, but allow sub-contracting, so that international contractors have the option to engage domestic sub-contractors.

9. This approach, where international skilled contractors are attracted to provide the services as head-contractor, who may engage local contractors to provide defined parts of the maintenance activities, should provide (i) satisfactory levels of technical expertise, management capacity and financial stability through the head-contractor; (ii) ability to draw upon the local knowledge, connections and network operating conditions already developed by domestic contractors; and (iii) promote skills and knowledge transfer from the head contractor to the domestic contractors.

B. Project Implementation Arrangements

10. ARA will be the implementing entity for the Project. The General Road Directorate (which was the organisation that transitioned into the Albanian Road Authority), has prior experience in managing WB financed operations through the *Albania Road Maintenance* and the *Transport Project*. These projects contributed to improvements in the management, safety and maintenance of the National Road Network, and supported the transformation of the General Road Directorate to the autonomous Albanian Road Authority.

11. ARA will implement the Project through a Project Management Team (PMT), which will be staffed by existing ARA personnel. As these staff will also have their normal duties, it is proposed that the PMT will be augmented, on an as-required basis, by consultants who will

provide additional support in Project procurement, financial, safeguards and contract management. An operating costs provided through the Project financing, will support this arrangement. ARA will attend regular monthly tri-partite progress meetings with contractors and monitoring consultants, and conduct site visits to discuss and address issues related to progress of works.

12. ARA, through its PMT, will be responsible for the delivery of TA to the secretariat of IMRSC for improving road safety outcomes. To coordinate and oversee the Road Safety TA, a Technical Steering Committee will be established consisting of members of MOTI and ARA. The Technical Steering Committee will guide the finalization of the ToR for the Road Safety technical assistance, and implement and monitor the progress of its activities. Issues and actions that go beyond the MOTI and Road and Traffic Safety Directorate mandate will be escalated to the IMRSC.

13. Independent contract monitoring will be provided by consultants engaged for the full term of the maintenance contracts. Their main role will be to (a) ensure that the service levels, specified in the maintenance contracts, are met, (b) administer the maintenance contracts and (c) certifying payments. However, they will have an additional role in providing performance and network condition data as input to the social transparency websites and feedback mechanisms.

14. The Project will finance TA for annual technical and DLI audits. After completion of the maintenance contracts, TA will also be provided for comprehensive completion and beneficiary impact assessments, to: (a) document Project impacts on beneficiaries; (b) re-visit the PSIA[35] study; (c) review lessons learnt, (d) review trends within the STS and impact assessments; (e) review the DLIs and results indicators; and (f) recommend improvements in Project design.

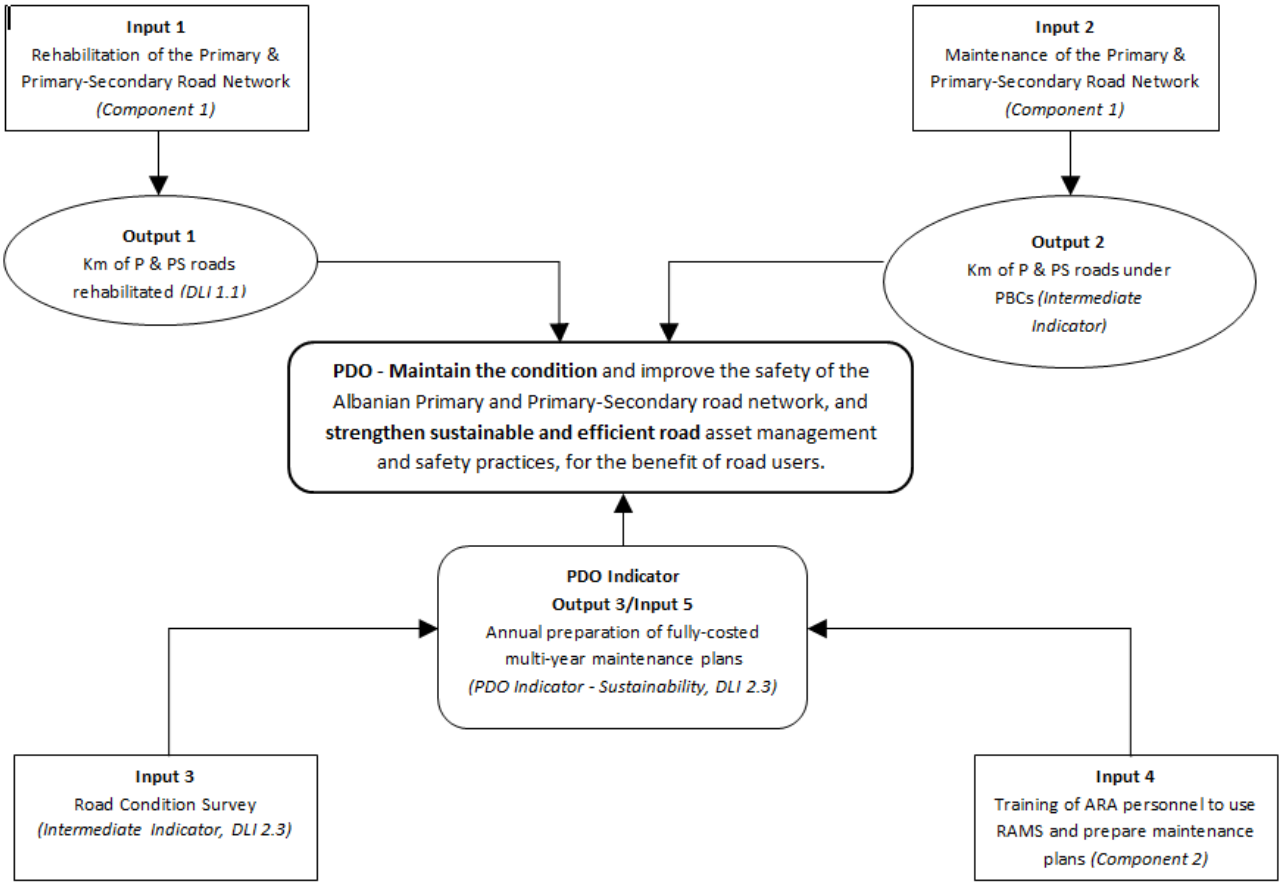
15. The Bank will undertake implementation support missions on a semi-annual basis. As these missions will be unable to inspect all maintenance activities under the Project, the outcomes of the annual technical and DLI audits will inform the mission agenda. Trends identified from the outputs of the STS may also provide additional focus

C. Project Monitoring and Evaluation Arrangements

16. The links between Project inputs, Project outcomes, results and DLIs, is shown visually in the diagram at Figure 3 (for Maintenance and Sustainability) and Figure 4 (for Maintenance and Safety).

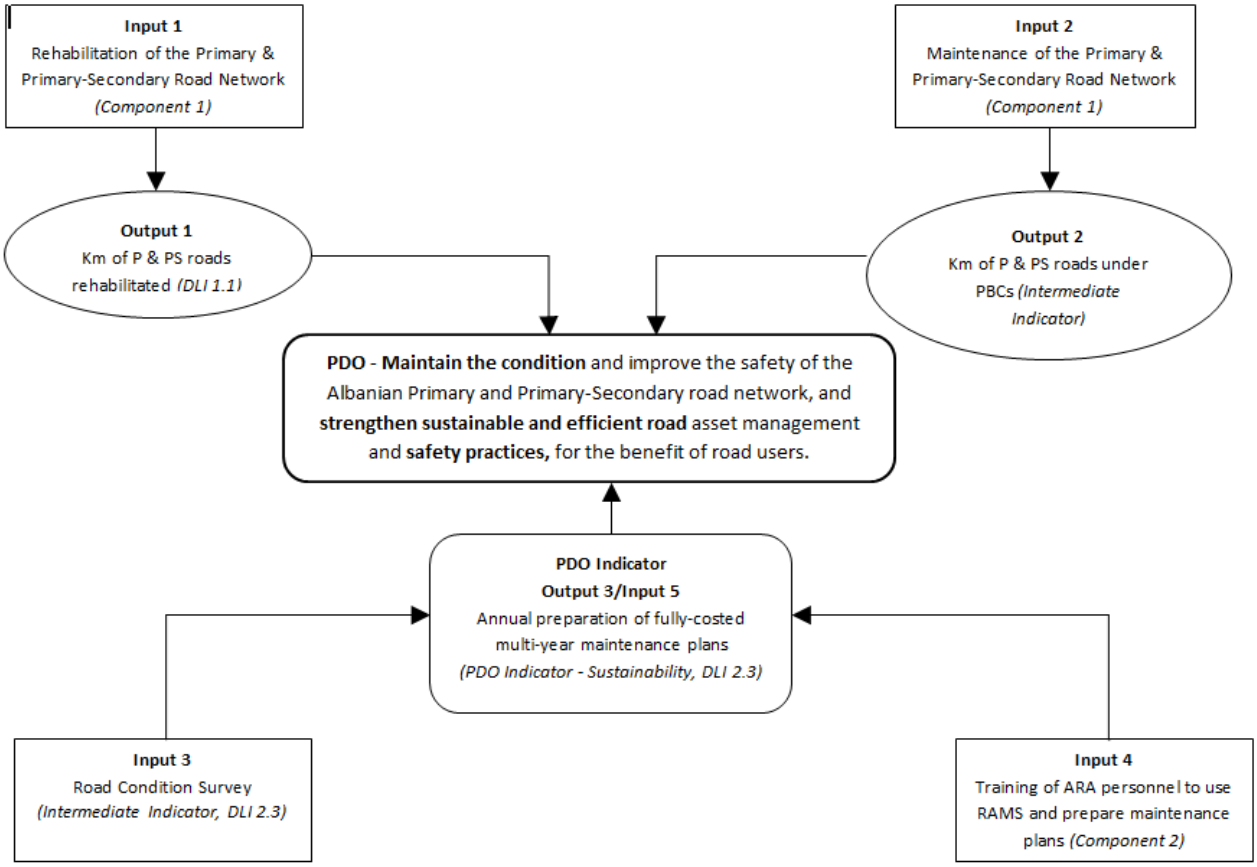
[35] PSIA Grant has been obtained for "*Road Safety and Poverty. Counting the Cost - Road Accidents and Impacts on Vulnerable Groups and the Bottom 40 percent*." This work is currently under preparation

Figure 3 – Links between Inputs, Outputs and Indicators (Maintenance and Sustainability)



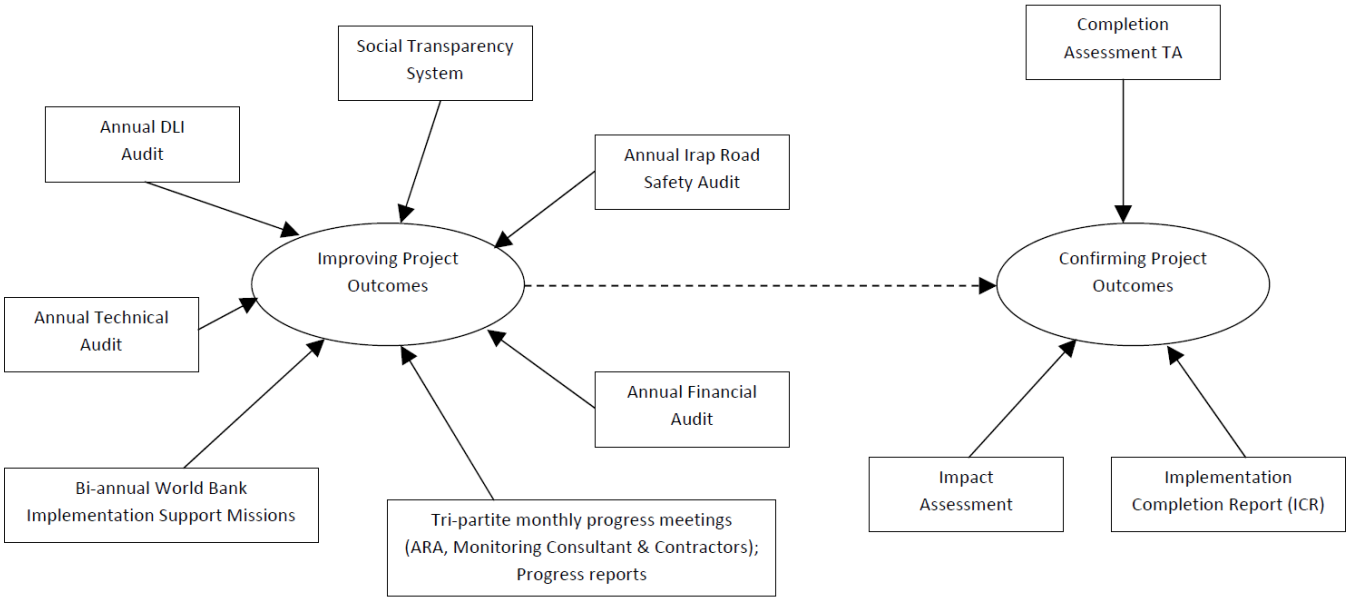
Note: Activities in Component 4 support overall implementation of the Project

Figure 4 – Links between Inputs, Outputs and Indicators (Maintenance and Safety)



Note: Activities in Component 3 supports implementation of the whole Project and sector

Figure 5 – Project Monitoring Processes



17. **Four PBC contracts will be used, averaging 350 km each, covering 1,335 km of the Primary (P) and Primary-Secondary (PS) national roads**. The PBC contracts will carry out:

- Periodic maintenance, which under the Project will include improvements and rehabilitation to restore the structural integrity and riding quality of severely deteriorated road sections, mainly through intensive pavement repair and ancillary works. Improvements will also address unsafe road conditions.
- Routine maintenance, aimed at preserving the road assets to the defined level of service (LoS). LoS will relate to aspects such as riding quality, comfort and safety, and will also include winter maintenance.
- Emergency works - to reinstate the roads after damage has occurred as a result of natural phenomena or accident

Bank Implementation Support

18. The Project start date is expected to be in March 2015 and implementation completion is planned by December 2021. The Mid-Term Review for the Project will be conducted not later than 40 months from the Effectiveness date, and as agreed between the Bank and Recipient.

19. The Bank will undertake implementation support missions on a twice-yearly basis. As implementation support missions will not be able to inspect all maintenance being conducted across the network under the Project, the outcomes of the annual technical and DLI audits will be used to inform the agenda for each implementation support mission. Trends identified from the outputs of the Social Transparency System (STS), which is described in Clause 20 below, may also provide additional focus for each mission. Output and outcome indicators to be used in this Project are outlined in Annex 1.

Social Transparency System

20. In addition, ARA through its PMT and monitoring Consultant will implement and manage a feedback and grievance redress system, which will allow road-users and the general public to submit feedback[36] on the Project and national network via sms, telephone and web interface. The web-site will also provide performance information and Project data to the public, to assist in transparency. This system, herein called the Social Transparency System (STS), will be designed and developed under Technical Assistance (TA) as part of the services of the Monitoring Consultant, and then be adopted and implemented through ARA PMT. The system will allow for all feedback that is be submitted to be additionally copied not only to ARA, but also to the Bank and the Monitoring Consultant, however ARA PMT will be responsible for follow-up and close-out, trend analysis and reporting.

21. It is anticipated that a number of advantages will result from the STS, for example, it will: (a) enable quick responses to unsafe or unsatisfactory road or safeguards conditions; (b), provide the public with a higher level of confidence in ARA's management of road maintenance; (c) improve transparency and governance perceptions; and (d) provide a system for dissemination of information regarding road conditions. The STS will also be an additional tool

[36] In this context feedback is defined as complaints, compliments, and requests for information and condition alerts.

assist in obtaining data for monitoring the impacts of the interventions, through analysis of the feedback and by providing annual questionnaires targeted at obtaining road-users perceptions of the projects outcomes. Such feedback will be disaggregated by both gender and socio-economic parameters.

22. As ARA PMT will be responsible for managing the system throughout the Project period, they will retain the expertise to continue its use beyond the life of the Project. Prior to Project completion, functionality of the STS will be reviewed as part of the TA for Completion Assessments, so that, if necessary, improvements can be made. In this way, STS will provide an important accountability and feedback link between ARA and its clients, the road-users, well into the future.

Audits and Technical Assistance

23. Through the Project, technical assistance (TA) will be provided to undertake annual technical audits, DLI audits, and iRAP safety audits. Prior to completion of the Project, but after completion of the maintenance contracts, TA will also be provided for a comprehensive completion assessment. The completion assessment will seek to: (a) document achievements and problems; (b) review any lessons from the PBC, review any trends within the STS and impact assessments; (c) review the DLIs and results indicators; (d) recommend improvements in the Project documentation; and (e) design of an impact evaluation in close collaboration with the Albanian Development Fund (ADF) aimed at expanding analytical work already carried out in the context of the Secondary and Local Roads Project[37]; (f) piloting selected road safety interventions proposed by the Project's Poverty and Social Impact Analysis (PSIA)[38] which consist of cost-effective policies and reforms focusing on the prevention and/or mitigation of road related injuries, specifically targeted at poor and vulnerable groups. Monitoring and evaluation of results will be the responsibility of the ARA all technical inputs will closely coordinated with the Bank and the ADF. All results will analyze the gender-specific impacts of the Project and evaluation and monitoring process will be gender-informed through STS and public consultations, as well as adequate disaggregation of data, where applicable.

24. Periodic iRAP surveys will be conducted to monitor improvements on road safety (and to address one of the results indicators). The surveys will also identify any further hot-spots that need attention under emergency works (variations) in the following year of maintenance works implementation.

[37] The first phase of an impact evaluation of secondary and local roads rehabilitation project began in 2012, using base-line and follow-up socio-economic surveys of households in project and non-project communities. The end line survey will be completed in 2015. The study provides a measure of significant causal project impact on income, employment, access to social services and socio-economic welfare of the beneficiaries. Results were disaggregated by gender, and implemented a difference-in-difference approach to compare treatment (project beneficiaries) and control (non-beneficiaries) groups.

[38] The Poverty and Social Impact Analysis assesses the distributional impacts of road fatalities and accidents on the poor, the bottom 40 percent, and other vulnerable groups in Albania. It is currently under preparation.

D. Financial Management

Financial Management Assessment and Overall FM Risk

25. A preliminary financial management (FM) assessment was carried out to determine the FM implementation risk and help establish adequate FM arrangements for the proposed operation. Areas that require further strengthening are identified and recommendations and complementary actions are provided to ensure that the Project is implemented within a sound fiduciary environment and meet the minimum requirements under OP 10.00, namely (a) recruitment of one additional financial management staff and further training in Bank financial management and disbursement, (b) preparation of the Project operational manual, and (c) installation of new, modern and sophisticated accounting software for the Project.

26. The most significant strength is the extensive experience of the head of finance sector in managing budget financing and her excellent track record in implementation of previous Bank/donor supported projects. However, there is low capacity among other accounting staff in the finance section, due to lack of familiarity with Bank Disbursement and FM requirements and limited number of staff.

27. Overall financial management risk level is assessed as 'Substantial'. The arrangements and mitigation measures are described in details in the following respective paragraphs.

Country Public Financial Management status

28. Albania has participated in a number of detailed reviews of its public financial management (PFM)**,** among them two Public Expenditure and Financial Accountability (PEFA) assessments (2006 and 2011), a Public Expenditure Review (2006), a Public Finance Review (2013), annual EU-SIGMA reviews, and other analysis by the World Bank, the IMF, the EC, and other organizations. The various reviews have plotted the significant progress Albania has made in improving PFM. The last PEFA assessment for Albania from 2011 concluded that Albania has an adequately functioning fiscal and budget management system, in the sense that the system has enabled the government to finance and execute a budget that delivers public services to the general population. Albania scores relatively well on comprehensiveness and classification of the budget, basic treasury operations (including budget, and payroll controls), financial reporting/transparency and public access to government budget and financial information. Lagging areas, as identified in the 2011 PEFA assessment include: (i) multi-year perspective in fiscal planning and policy formulation; (ii) internal audit; (iii) implementation of the integrated planning system (FMIS); and (iv) scope and nature of the external audit function.

Use of country systems

29. The proposed Project will partially use the Government Financial Information System (GFIS), state treasury, to the extent that government funds for VAT and Project expenditure will be made available to pay for Project expenditure through the system. While the system may be capable of managing and executing financial transactions in local currency, transactions in

multiple currencies are not enabled, which weaken the system's performance as a tool for Project accounting and reporting and funds flow for the loan proceeds.

Financial Management staff

30. ARA organizational structure and existing financial management capacity was analyzed. The supporting services department, through the finance sector, is in charge for payments, accounting and reporting. The head of the finance sector has provided similar functions in the previous Bank supported projects, and therefore has the necessary experience and knowledge. However, there is low capacity among other accounting staff in the finance section, due to lack of familiarity with Bank Disbursement and FM requirements and limited number of staff. For this purpose an additional qualified and experienced financial management specialist (FMS) would be required to support the sector, in taking over the expected additional workload, as the Project activities scale up. This will be provided through the Project operating costs in component 3. The hiring of the FMS would also mitigate the risk of the departure of the current head of the sector. During the Project implementation, periodic and on job training on Bank disbursement and financial management will be provided to the finance staff engaged in the Project as part of the Bank training program.

Budgeting and counterpart funding

31. The operation will rely on country public budget and planning systems. ARA through its department of budget and planning will be responsible for the preparation of Project annual and medium term budgets and forecast, in line with the approved implementation plans and procurement plans, throughout the life of the proposed Project. The planning function will be closely linked with contract management (procurement, planning and implementation/management of contracts) to ensure that forecasts and budgets are updated regularly. Project budgets will include investment spending forecast to be financed by the loan proceeds and counterpart funds. Support will be provided by the ARA Finance Sector (through the experienced FM specialist assigned to the Project). The annual Project budgets will be reviewed and approved by ARA Board of Directors. The annual budget preparation process will be aligned with the MOTI budgeting process, and the Project budget and forecast will be included with MOTI budget and forecast, where identified and monitored separately. Variances of actual versus budgeted figures will be monitored on a regular basis, appropriately analyzed and corrective actions taken

Accounting and maintenance of accounting records

32. The existing accounting software, used in previous Bank supported operations implemented by ARA, is adequate for Project financial management purposes. However, as the Project activities will scale up once the implementation starts, a more modern and sophisticated accounting software will facilitate and enhance program accounting and financial reporting. The new software will enable the ARA to cope with the volume and amounts of transactions to appropriately manage all expenditures and transactions in multiple currencies and generate the financial reports. The Terms of Reference and specifications for the software will be agreed between ARA and the Bank before the procurement process starts, and will ensure that it

includes all relevant features for the accounting for the program. The software will follow cash based accounting (cash based IPSAS), recording transactions when actual payment is done, rather than when they are incurred. The software will enable financial contract monitoring, commitment and liability reporting. The paragraph 29 provides the indicative date when the software will be ready for Project use. Project accounting records will be maintained temporarily in the existing accounting software, until the new software will be ready for use and populated with such data.

Periodic financial reporting

33. Interim un-audited financial reports (IFRs) which will include financial information relating to the entire program and all sources of financing, will be prepared on a semi-annual basis and will be the basis for reporting eligible expenditure. The format and content for the interim financial reports (IFRs) and will be part of the Project operational manual. ARA will be required to submit to the Bank periodically IFRs not later than 45 days from the end of the period. The annual Project financial statements will be prepared in accordance with International Public Sector Accounting Standards cash basis. The reports will be prepared in Albanian Lek and in the currency of the Loan Agreement.

34. The IFRs are intended to comprise the following reports:

- Cash Receipts and Payments, including comparison of budgeted versus actual amounts (including the Bank and the government); The IFR will necessarily include an apportionment of eligible expenditures, for the period, to the World Bank, and to the Borrower.
- Uses of Funds by Activity;
- Designated Account statement;
- Cash Forecast (for Bank and government of Albania financing);
- Contract Management information – planned and current;
- Accounting policies and explanatory notes.

Internal controls

35. Details on institutional and implementation arrangements will be described in the Project Operational Manual (POM). It will include Financial Management section of the POM, covering key internal control mechanisms to be followed by the staff in the application and use of Project funds. This will elaborate the fiduciary controls, fund flows, documentation flow and roles and responsibilities of the key implementing agencies. The POM will provide a detailed description of processes (budgeting, execution of expenditure, recording, reporting, auditing) and will depict the key control activities that will ensure proper verification, authorization and documentation of all Project expenditure, proper contract financial monitoring, adequate segregation of functions, job descriptions for staff with different authority levels. The manual will also describe procedures for ensuring completeness of accounting transactions, reliability of accounting data, and regular financial reporting. The preparation and adoption of POM will be an effectiveness condition.

External audit

36. The annual financial statements covering the whole program and all sources of financing will be audited in accordance with terms of reference acceptable to the Bank (ISA) by a private sector audit firm acceptable to the Bank, and the audit report will be submitted to the Bank not later than six months after the end of the fiscal year/period audited. The auditor for the Project will be appointed annually by the Ministry of Finance as part of an overall agreement for the audit of the non-revenue earning Bank-financed portfolio in Albania. The audit service fee is covered by MOF. Specific terms of reference based on International Standards on Auditing are used for the Project covered by this agreement and are cleared annually by the Bank. MOTI/ARA will publish the annual Project audit reports on its website within two months from submission. Financial audit will complement other initiatives (e.g., technical and DLI audit) that form an integral part of the oversight and control framework of the program. No history of overdue audits by the implementing agency was observed in the past.

Funds flow

37. A foreign currency designated account, using the currency of the Loan Agreement, will be opened in the Bank of Albania. This will be the account to which funds from the World Bank will be withdrawn (deposited). Funds from this account will be transferred to the Project account in a commercial bank denominated in the same currency. The government contribution for VAT and Project expenditure will be made available through the Project account in the treasury system, based on annual approved budgets and cash forecasts. The government and loan funds will be used to pay for eligible Project expenditure as they incur. To minimize foreign exchange losses IBRD loan proceeds will be used to pay for foreign currency payments and to the extent possible government contribution for local currency payments.

Financial management action plan

38. Financial Management Action Plan. An action plan has been prepared and will be agreed with ARA to ensure that adequate FM systems are in place before implementation.

Table 7 - Financial Management Action Plan

Action	Responsible	Completion date[39]
Prepare Project operational manual (effectiveness condition)	ARA	June 30, 2015
Hiring of qualified FM specialist	ARA	June 30, 2015
Training of FM specialist for the use of GFIS	ARA	July 31, 2015
Purchase of an accounting software suitable for the Project financial management	ARA	July 31, 2015

E. **Disbursements Arrangements**.

[39] This column presents the estimated completion date and is not an indication of legal conditions.

39. The Project has been designed to utilize the model of results-based disbursement.[40] Therefore, advances and disbursements will be based on IFRs, actual expenditures reported and, for some advances, on the achievement of DLIs, and will include a rolling cash-flow forecast report for the following twelve months. The use of six-month IFRs will allow for advances to provide liquidity for Project implementation. Exclusively upon review and examination of the IFR that is produced at year-end, if the Bank agrees with the reported implementation and use of funds, the previous advance will be accepted and converted into disbursements (accounting treatment for the World Bank). The IFR which is reporting on the use of the previous advance will also be the basis on which the Bank to agree to advance additional funds, accounting for any unused portion of the previous advance as well analyzing the realism of the forecasted activities and contracts. It has been agreed that DLIs will be utilized, on an annual basis and in addition to expenditures reported through IFRs, to determine the amount of eligible expenditures being documented, that is, converted from advances into disbursements, to be charged to the relevant disbursement category.

40. For the World Bank's share of eligible expenditures reported for a given semester, the following procedures will apply:

- Upon the declaration of effectiveness, the initial advance to be made will be based on a cash-flow forecast; this advance will cover two semesters and will provide sufficient liquidity for the Project to begin a number of activities. The second advance and third advance with respect to Semester 1 and 2 reporting, will take place at the end of the respective semester. These advances will be based on IFRs and cash flow forecast of the Project for the subsequent two semesters. These advances will not be linked to DLIs and IFRs produced at mid-year will not be used to convert prior advances into disbursements.

- The fourth advance (Semester 3 reporting) will take place at the end of the third semester and will be made on the basis of IFR-documented expenditures and confirmation of the achievement of DLIs (fully or partially) which will determine the amount of eligible expenditures that will be converted, for the period being reported, from advance into disbursements and charged to the relevant disbursement category in the Loan Agreement. DLIs will be utilized to, in retrospect, decide whether or not the amount of expenditures being reported for the period will be converted into disbursements in full (100% performance), only partially, or not at all (0% performance). The validation and verification of DLI achievement will be carried out by the independent DLI audit (which is separate and distinct from the financial audit). The protocols for DLI measurement, verification and validation are presented below.

- As implementation progresses, the fifth advance (Semester 4 reporting) will follow the same process as the third advance; the sixth advance (Semester 5 reporting) will follow the process as the fourth advance. This pattern will be

[40] Except for Component 3 and 4 activities. The main characteristics of the results-based disbursement mechanism are disbursements are made following a disbursement request and upon the World Bank's task team verification that (i) compliance and achievement of the DLI and (ii) the eligible expenditure have been documented sufficiently to cover the disbursement.

repeated throughout the remaining life of the Project – one reporting semester period where only financial information is presented to the Bank (no DLIs will be included) and for which the IFRs will only be used to authorize further advances; and the following semester period where financial information and DLI verification will be presented and for which IFRs will be used both for advances and, along with the achievement of DLIs, for conversion of prior advances into disbursements. The subsequent advances may be reduced if information in the IFR (including contract management information) demonstrates that the implementation schedule cannot be maintained.

- With regard to the achievement of DLIs, most are straight-forward in terms of determination of achievement (yes/no) (DLI 1.3 with respect to Year 1; DLI 2.1; DLI 2.2; DLI 2.3). Therefore if these DLIs have been determined to have been fully met (yes/no), then the full financial value of the prior advances related to the DLIs will be recognized as eligible expenditures and converted into disbursements. If these DLIs, except DLI 2.2, are not met in the originally envisioned time period, the Bank will not recognize the prior advances as eligible expenditures or convert them into amounts disbursed; these amounts will be carried forward as [undocumented or outstanding] advances. Additionally, the Bank may reduce the amount of subsequent advances requested. ARA will submit an action plan with a revised schedule to achieve the targets. Once the targets have been met, and information is provided that validates and verifies that these DLIs have been fully met, the Bank will then proceed to recognize the full amount of expenditures as eligible and as disbursed and will grant the full amount of requested advances to resume. If DLI 2.2 is not met in the envisioned time period, than the respective amount of prior advances will not be converted as a disbursement. Additionally, the respective loan amount will be cancelled in consultation with, or reallocated with the agreement of the MOF. The Bank may, in this respect, decide to reduce proportionally subsequent advances for the Project.

- Other DLIs are scalable (DLI 1.1; DLI 1.2, and DLI 1.3 for the Years 2-5) which allows for flexibility if the targets have been partially met. In the event that targets have not been fully met (i.e., downward scalability), the Bank will only proportionally (proportionally means using the same percentage of achievement of the DLI relative to the baseline target) recognize and convert prior advances into eligible expenditure and disbursements. With respect to DLI 1.1, the amount of the prior advances that are not recognized and converted into disbursed amounts, equal to the unachieved DLI amount in the originally envisioned period, will carry forward as [undocumented or outstanding] advance. In such case, ARA will submit an action plan (time-bound) to the Bank that will present a new schedule to meet the original targets. Once the DLI has been met, ARA can submit documentation (in the IFR as well as through the independent DLI audit) to convert the remaining portion of advances into eligible expenditures and disbursement. While for DLI 1.2 and DLI 1.3 for the Years 2 to 5 (time-bound), the respective loan amount of the unachieved DLIs in the envisioned time period shall be cancelled in consultation with, or reallocated with the agreement of the

MOF. The Bank may, in this respect, decide to reduce proportionally subsequent advances for the Project.

- On the other hand, if any of the targets of the scalable DLI 1.1 are exceeded (i.e., upward scalability) relative to the baseline targets, the Bank will recognize that the baseline has been met and will recognize the marginal amount of the target that has been exceeded. This will be counted against the future year targets. The Bank will recognize the full amount of prior advances as eligible expenditures and convert these amounts into disbursements. The Bank will also recognize, proportionally and relative to the marginal difference that the baseline target had been exceeded, an additional amount of expenditure of the prior advances as eligible and convert this into amounts disbursed as well.

- The overall cap of financing per DLI category (80% for DLI 1; and 20% for DLI 2) will be regularly monitored and reconciled at the end the Project. Due to the involved nature of monitoring the achievements of DLIs and the impact on the amounts to be converted into disbursements for some reporting periods, the Bank's task team will closely monitor (i) the overall cap (ii) the determination of achievement (yes/no) and (iii) the upward and downward scalability of the applicable DLIs, and will provide clear guidance to ARA, at the end of each reporting period, in regards to the amount of eligible expenditures that the Bank will accept and the consequences on conversion to disbursements and subsequent advances.

- Regardless the level of performance against DLIs, the Bank will not recognize disbursements in excess of the amounts reported through IFRs.

F. Procurement

41. Procurement process under the Project will be carried out in accordance with World Bank "Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 revised in July 2014; and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 revised in July 2014, and the provisions stipulated in the Legal Agreement. The World Bank Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credit and Grants dated October 15, 2006 and revised on January 2011, would also apply. The Bank Standard Bidding Documents, including evaluation for procurement of works and goods will be used, as well as the Bank's Standard Request for Proposal for selection of consultants, including the sample evaluation report.

42. ARA will be the implementing agency undertaking the procurement tasks for Project administration and implementation. The conclusions of the procurement risk assessment show that the procurement risk identified during the review until now is "substantial". The potential risks of insufficient experience with procurement and implementation of Performance-based Contracts, misapplication of the Bank's procurement and consultants' guidelines, corruption, lack

of procurement capacity of ARA's PMT, implementation delays and insufficient capacity and knowledge of local construction industry will be mitigated through (i) strengthening PMT's procurement and contract administration capacity via training and workshops, (ii) hiring of at least one procurement consultant experienced in Bank's procurement policies and procedures and, if needed, additional internationally experienced consultants on procurement and contract management, (iii) preparation of detailed bidding documentation before Project effectiveness helped by international experienced consultant hired for preparation of the Project while including lessons learned from the piloted Output and Performance-based Contracts, (iv) close involvement of Bank's team in Project implementation support, including monitoring of fiduciary aspects that will be conducted by combining prior review with field missions, during which post-review contracts will be checked, and (v) business outreach workshops for local construction industry and other companies in the country.

Procurement Methods

43. The following methods may be used for procurement of goods, works and non-consulting services as agreed in the procurement plan: International Competitive Bidding (ICB), Shopping (S), and Direct Contracting (DC). The Borrower, by negotiations, will complete the procurement packages for PBC of maintenance works and the Terms of Reference for Monitoring Consultants.

Procurement of Goods, Works and non-consulting services

44. Goods, Works and non-consulting services procured will include routine and periodic maintenance services, safety improvement and emergency works. Procurement for all ICB procedures will be done using the Bank's Standard Bidding Documents (SBD). Smaller value contracts as needed will be procured by following shopping procedures using the Invitation to Quote - ITQ (edition of May 2011) for works and goods (edition of June 2011), depending on the cost estimate of the package.

Selection of Consultants

45. Consultant services will include Monitoring Consultants to administer the works contracts, studies, training, surveys, institutional strengthening, Project management and advisory services. The following methods may be used for the selection of consultants: Quality and Cost-Based Selection (QCBS), Quality-Based Selection (QBS), Least-Cost Selection (LCS), Fixed Budget Selection (FBS), Selection based on Consultants Qualifications (CQ), Individual Consultant Selection (IC), and Single Source Selection (SSS) for firms and individuals. The World Bank's Standard Request for Proposals will be used. All Terms of Reference, irrespective of prior/post review status, are subject to Bank's review and no objection.

Training and Training Plan

46. The institutions providing standard training, conducting seminars and organization of study tours would be selected on the basis of analysis of the most suitable program of training offered by the institutions, availability of services, the period of training and the reasonableness

of cost. However, consultants hired to deliver training under the Project shall be selected in accordance to the selection methods as stipulated in the Consultant Guidelines applicable to the Project. An annual training plan shall be prepared and agreed with the Bank. It will include information on the title of training, institution that shall provide it, timeline, cost, number, position and names of relevant people to be trained. The training plan shall be updated in agreement with the Bank through the duration of the Project at least annually or as required to reflect the actual Project implementation needs.

Procurement Plan

47. The Borrower, at appraisal, will review the preliminary Procurement Plan (PP) prepared during the preparation phase, for the entire Project scope consistent with the implementation plan, which provides information on procurement packages, methods and Bank review method. Since this would cover the entire Project completion period it will be tentative. However, a firm procurement plan for the first 18 months of the Project will be prepared and this plan will be agreed upon between the Borrower and the Bank Project team at negotiations, and will be available at the implementing agency's Project database and on the Bank's external website. The PP will be updated in agreement with the Bank Project team annually or as required to reflect the actual Project implementation needs and improvements in the implementing agency institutional capacity.

Frequency of Procurement Supervision

48. In addition to the prior review supervision to be carried out by the Bank team, the capacity assessment of the Implementing Agency recommends post reviews to be carried out by the Bank team, on at least 20 percent of the contracts subject to post review. It is expected that a supervision mission in the field will be conducted every six months during which post reviews will be conducted. As a minimum one post review report which will include physical inspection of sample contracts including those subject to prior review will be prepared each year. Not less than 10% of the contracts will be physically inspected.

49. The thresholds and review frequency may be revised during the Project's mid-term review or when it may be necessary taking into consideration the implementing agency capacity and performance.

Records keeping and filing

50. The PMT will keep procurement documentation safe and well protected at their premises. Initial Procurement Plan is dated November 2014.

Table 8 - Procurement Arrangements and Schedule for Goods and Works

Packages	Project Title and Scope	Procurement Method	Pre-Qualification (Yes-No)	(Prior/Post)	Expected Bid Opening date
1	Maintenance Works contract A	ICB	Yes	Prior	May 2015
2	Maintenance Works contract B	ICB	Yes	Prior	May 2015
3	Maintenance Works Contract C	ICB	Yes	Prior	May 2015
4	Maintenance Works Contract D	ICB	Yes	Prior	May2015
5	Road Safety Equipment	ICB	No	Prior	Jan 2016

Table 9 - Procurement Arrangement and Schedule for Selection of Consultants

Package	**Description**	**Selection method**	**Prior/ Post**	**Expected Proposal Opening Date**
1	Monitoring consultants	QCBS	Prior	April 2015
2	Road Safety TA	QCBS	Prior	Nov 2015
3	Road Asset Management TA	QCBS	Prior	Sep 2016
4	Road Safety Database	QCBS	Prior	Aug 2015
5	Preparation of Transport Sector Strategy	QCBS	Prior	Sep 2015
6	Support to medium term road program for investment and maintenance	QCBS	Prior	Jan 2016
7	Update of the Albanian National Transport Plan (ANTP)	QCBS	Prior	Jan 2016
8	Preparation and adoption of the Road Construction and Maintenance Standards (Manuals)	QCBS	Prior	Jan 2016
9	Independent technical/DLIs annual audit	QCBS	Prior	Sep 2015
10	TA for completion and impact assessment	QCBS	Prior	Feb 2020

G. Environmental and Social (including safeguards)

Implementation arrangements

51. The environmental specialists of ARA will support the Project activities by ensuring activity screening as per the EMF, and preparation of EMPs and RAPs where needed. The safeguards implementation will be supervised by the World Bank specialists during regular supervision missions.

Risk rating and mitigating actions

52. At least once a year, during Project implementation, the EMF will be reviewed and revised based on the implementation experience, and upon suggestions of the ARA environmental and social team, with approval from the World Bank team. Risk rating and mitigating actions required.

Monitoring and Evaluation

53. Regular supervision reports will include sections on environmental management.

H. Impacts

54. RRMSP will identify the impacts on beneficiaries on the basis of gender, by (i) disaggregating results indicators by gender; (ii) using the Social Transparency System (STS) to monitor trends and patterns, where such patterns will be disaggregated by gender, amongst other variables; (iii) ensuring that the Accident Information System is developed such that data can be disaggregated by gender and socio-economic criteria; and (iv) if the gender variable is significant in determining a pattern of feedback/complaint then the Project will take follow up actions.

Poverty Reduction Impact Assessment

55. RRMSP will create employment opportunities for activities related to road maintenance throughout the country. This will include not just management level roles, but lower skill roles such as laborers, gangers, plant operators and administration assistants. The Project will provide opportunities in all regions of the country for sustainable sources of employment and income for the poor, especially in rural communities, where the prevalence of poverty is highest. The envisioned routine and periodic maintenance activities are also expected to generate multiplier effects in the local economies. Unlike short-term road construction projects, the maintenance programs that will be initiated under RRMSP are expected to create skills and provide long-term jobs, likely to last beyond the Project period. Statistics on employment opportunities created under the Project will be collected and disaggregated by gender and other socio-economic criteria.

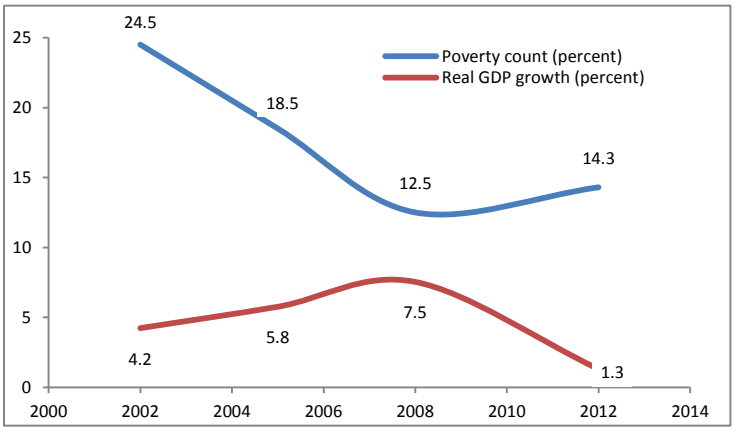
Bottom 40 percentile income group

56. With better maintained roads, improvements on connectivity and mobility at the community level are anticipated. This will enable low-income and marginalized groups to have more reliable access to employment poles, in areas where income-generating opportunities outside of agriculture are offered. Well-maintained roads can also have a positive impact on the development of markets, agricultural productivity and more generally, on the livelihoods of rural communities which are removed from centers of economic activity. An improved road network will also facilitate access to social service facilities, enhancing social outcomes in the health and education sectors in particular. Finally, improvements in road safety are anticipated to have a positive distributional outcome. Males are the main victims of road traffic fatalities in Albania, and because males are also often the primary breadwinners within low-income households, there is a clear rationale for improving road safety on equity grounds. A Poverty and Social Impact Assessment (PSIA) grant[41] has been secured to help assess the negative impact of the road accidents on lower income and vulnerable groups.

Contribution to Poverty reduction through growth

57. The Project will contribute to economic growth, through direct road maintenance expenditure and also by a multiplier effect in local communities across the country. Figure 6 shows the relationship between economic growth and poverty in Albania, demonstrating that there is a strong link between improvements in GDP and lifting people out of poverty.

Figure 6 – Poverty and GDP Relationship in Albania



[41] PSIA Grant has been obtained for "*Road Safety and Poverty. Counting the Cost - Road Accidents and Impacts on Vulnerable Groups and the Bottom 40 percent*." This work is currently under preparation.

I. Readiness

58. ARA and the preparation consultants have completed technical designs, defining also contract packaging for PBC maintenance works. A preliminary Procurement Plan has been prepared, which targets the award of PBC contracts by regions. Bidding documents, along with the Requests for Proposals for the associated Monitoring consultants are in the process of being finalized. This level of preparedness has been made possible as a result of ARA's past experience with World Bank financed projects and through the assistance of ECAPDEV Project preparation consultant. ARA is well supported by other Government agencies, such as the Ministry of Finance and the Ministry of Transport and Infrastructure.

59. A draft Environmental and Social Management Framework (EMF) document was prepared and disclosed in country in October 2014. The EMF harmonizes the environmental legislative requirements of Albania with the safeguards policies of the World Bank into one common approach. The EMF screening process will ensure that no additional World Bank safeguards policies are triggered and that no "Category A" works are financed by the Project. A Resettlement Policy Framework (RPF) has been prepared that addresses all possible impacts that can trigger Social Safeguards Operation Policies. The harmonized approach was also used to prepare template Environmental Management Plans (EMPs) for two road sections, as well as RPF and RAP template, with public consultations held in October 2014. The ESMF, RPF and two EMPs have been finalized and were disclosed in-country and the Bank Infoshop, respectively, on December 1 and December 3, 2014.

Annex 4: Implementation Support Plan

ALBANIA: Results-based Road Maintenance and Safety Project

A. Strategy and Approach for Implementation Support

1. The strategy for implementation support has been developed based on the nature of the Project and its risk profile. It aims at making implementation support to the client flexible and efficient, and will focus on addressing the risk identified in the Systematic Operations Risk-rating Tool (SORT).

Implementation for Procurement

2. Implementation support will include:

(a) Providing on-going support to the Albanian Road Authority (ARA) in relation to Project preparation under the ECAPDEV grant. Such support to be provided throughout the Preparation phase;
(b) Providing on-going guidance and timely feedback to ARA on the Bank's Procurement Guidelines. Such support to be provided throughout both the Project preparation and implementation stages;
(c) In conjunction with ARA, the Bank will monitor procurement progress against the detailed Procurement Plan, and provide guidance in the preparation and updating of the Procurement Plans
(d) Providing procurement clinics to staff of the ARA Project Management Team (PMT) involved in procurement functions during the Project preparation phase; and
(e) Providing training in identifying Fraud and Corruption in procurement. To be provided by the Bank to ARA staff involved in the construction cycle during the Project Preparation phase;

Implementation Support for Financial Management

3. During implementation support missions, the Bank team will review the Project's financial management system, including but not limited to, accounting, reporting and internal controls. Supervision will also cover sub- projects on a random sample basis.

Implementation Support for Environmental and Social Safeguards

4. The Bank team will supervise the implementation of the agreed Environmental Management Framework and provide guidance to ARA to address any issues. Implementation support for safeguards management will also be provided through the ARA PMT, supported where require by individual consultants under Component 3.

Implementation Support for Technical and Engineering issues

5. The technical and engineering team (based in both Albania and Washington DC) will review bid documents to ensure fair competition through proper technical specifications and fair assessment of the technical aspects of bids. During implementation, technical supervision will be undertaken to ensure that technical contractual obligations are met. Assistance will be sought through short term consultants if / when required.

B. Implementation Support Plan

6. Formal supervision and field visits will be carried out semi-annually. Detailed inputs from the Bank team are in the tables below.

Table 10 - Summary of Resource Skills

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Task Team Leader	76 SWs	Fields trips as required	CO based
Senior Transport Specialist	62 SW	Fields trips as required and two missions p/a.	HQ based
Project Assistant	8 SW		CO based
Civil Engineer / STC	8 SW	Fields trips as required	
Procurement	16 SW	Fields trips as required	CO based
Social Specialist	13 SW	Fields trips as required and two missions p/a.	Regionally based
Environment Specialist	13 SW	Fields trips as required and two missions p/a.	Regionally based
Financial Management specialist	20 SW		CO based
Legal Counsel	2 SW	Mid-term review	HQ based

Note: CO – Country Office; HQ - Headquarters

Table 11 - Estimated Resource Requirements

Time	Focus	Resource Estimate	SW's (Staff Week)
First twelve months	Technical and procurement review of the bidding documents	TTL/Sen Infrastructure Specialist Senior Transport Specialist Procurement Specialist(s)	6 6 4
	FM training / supervision	FM specialist	4
	RAP guidance/supervision	Social specialist	3

Time	Focus	Resource Estimate	SW's (Staff Week)
	Environmental guidance & supervision	Environmental specialist	3
	Project Management	TTL Project Assistant	2 2
	Team leadership/Svn Leadership Support/Svn	TTL Senior Transport Specialist	6 6
12-48 months	Project Maintenance phase	STC/Engineer TTL Senior Transport Specialist Procurement Specialist	4 24 24 6
	Environment and social monitoring & reporting	Environmental specialist Social specialist	6 6
	Financial management disbursement and reporting	FM specialist	6
	Team leadership/Svn Leadership Support/Svn	TTL Senior Transport Specialist Project Assistant	8 2 2
48 - 60 months	Project Maintenance Phase	STC/Engineer TTL Senior Transport Specialist Procurement Specialist	4 16 16 6
	Environment and social monitoring & reporting	Environmental specialist Social specialist	4 4
	Team leadership/Svn Leadership Support/Svn	TTL Senior Transport Specialist Project Assistant	8 2 2
	Financial management disbursement and reporting	FM specialist	4
60 - 72	Team leadership/Svn Leadership Support/Svn	TTL Project Assistant	6 2
	Senior Transport Specialist	Project Finalisation / Lessons	6
	FM, Disbursement (DLIs)	FM specialist	6

Note: SW – Staff-Week, Svn = Supervision, TTL – Task Team Leader

Annex 5: Poverty Assessment and RRMSP

ALBANIA: Results-based Road Maintenance and Safety Project

1. This annex provides a summary of key socio-economic and demographic aspects in Albania, presenting the latest data used by the National Institute of Statistics in Albania (INSTAT) to geographically identify the location of the poor and bottom 40 percent. Drawing on a preliminary socio-economic impact assessment[42], the annex later describes critical mobility and accessibility constraints in selected Project areas. Subsequently, it presents the results of a Poverty and Social Impact Analysis focus on road safety and poverty. Drawing on results, consultations and policy recommendations from both reports, the annex concludes by discussing how the poor and bottom 40 percent are likely to benefit from the proposed road maintenance and safety interventions.

Poverty and Shared Prosperity in Albania

2. **Between 1998 and 2008, and prior to the global economic downturn, Albania sustained high rates of economic growth, averaging about 6.2 percent, poverty was halved, falling from 25.4 percent in 2002 to 12.8 percent in 2008, and unemployment sharply declined.** During that period, industry and construction grew at around 14-15 percent per annum, and were the key drivers of economic expansion. The global financial crisis in 2008 and the subsequent Eurozone crisis led to a significant slow-down in Albania's growth. Albania was able to avoid a recession but GDP growth slowed to less than 3 percent on average between 2009 and 2012 as exports, remittances and inflows suffered, in particular from Albania's close ties to the Greek and Italian economies. As corollary of the financial crisis and subsequent economic slowdown, the national poverty rate increased from 12.4% in 2008 to 14.3% in 2012. This means that roughly 28,896 people in addition to 373,137 poor people in 2008 fell into poverty. Similarly, the extreme poverty headcount, which had seen a sharp decline from about 5 percent in 2002 to 1.2 percent in 2008, bounced again to 2.2 percent in 2012.

3. **Poverty in Albania is an equally pronounced phenomenon in rural and urban areas.** The analysis of poverty by area of location, from 2002 to 2005, indicates that the reduction of poverty in urban areas was more pronounced falling by 42.5% against 18% in rural areas. Conversely, from 2005 to 2008 the urban headcount poverty rate decreased by 10%, whereas the rural headcount poverty rate decreased by around 40%. Despite the positive trends observed in the beginning of the decade, the aftermath of the global financial crisis hit both urban and rural households by increasing the total number of urban poor to 13.6 percent and 15.3 percent respectively.

[42] The Socio-Economic Diagnosis was carried out between September and October 2014. Its main objectives where to assess socio-economic impacts of the Project, informing the design and implementation arrangements to maximize pro-poverty impact and promote shared prosperity on project's area of influence, focusing on three representative road sections and the villages likely to benefit from the broad spectrum of road maintenance activities. The study gathered data on main social and economic indicators from central and local authorities, in-depth interviews, and focus group discussions. The study gave special attention to analyzing project's impact on low income and other vulnerable groups (women, elder, disabled), Small and Medium Size Enterprises (SMEs), and small-scale farmers.

Table 12 - Evolution of Poverty and GDP in Albania 2002-2012

Year	2002	2005	2008	2012
Poverty Count (Total-percentage of the population)	24.5	18.5	12.5	14.3
Poverty Count (Rural-percentage of the population)	29.6	24.2	14.6	15.3
Poverty Count (Urban - Percentage of the Population)	19.5	11.2	10.1	13.6
GDP Growth (Percentage over year earlier)	4.2	5.8	7.5	1.3
Extreme Poverty	**5**	**3.5**	**1.2**	**2.2**

4. **Despite notable improvements in the last decade, regional income disparities exist, with the Coastal and Mountainous Region exhibiting the highest poverty rates.** In 2012, differences in poverty rates across regions have increased compared to what they were in 2008, with the exception of the Mountain areas[43]. Unlike 2008 in which the Mountain areas were the only ones with a slight increase in poverty, in 2012 the Mountain areas are those who had witnessed a slight reduction of poverty reduction. In these areas poverty fell from 26.6% in 2008 to 15.3% in 2012. Nonetheless, this reduction may be as a result of population shifts and continuation of movements from Mountain areas to the rest of the regions. Consequently, the other three broad regions of the country may have shared the burden of these movements among other things and therefore experience an overall increase in poverty. For instance, in the Coastal areas, which witnessed the largest increase in poverty in that period, 17.6% of the population was poor in 2012 compared with 13% in 2008. Tirana also experienced a sizeable increase in poverty from 8.7% in 2008 to 12.6% in 2012. Finally, the Central regions remained broadly within the same range; from 10.7% in 2008 to 12.5% in 2012 (INSTAT, World Bank 2013). When looking at the 12 prefectures that make up the country, regional disparities become more evident, Elbasan and Gjirokastër exhibiting rates of 10.7 percent each, while the rate in Kukës reaches 21.8% (Table 18).

Table 13 - Evolution of Poverty by Region 2002-2012

Geographic Zone	2002	2005	2008	2012
Coastal	20.6	16.2	13	17.6
Central	25.6	21.2	10.7	12.5
Mountain	44.5	25.6	26.6	15.3
Tirana	17.8	8.1	8.7	12.6
Total	**25.4**	**18.5**	**12.4**	**14.3**

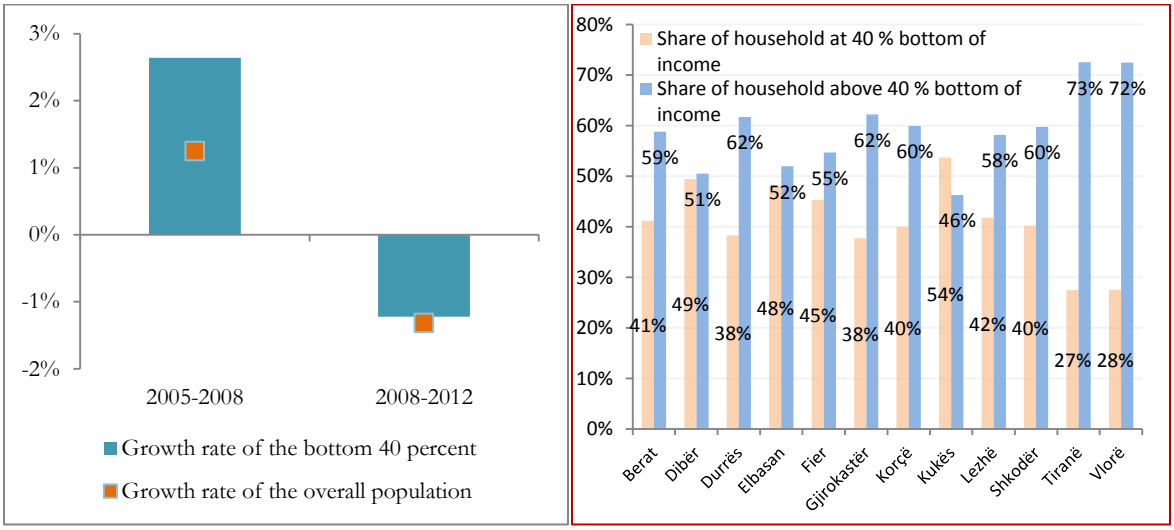
[43] **Coastal Area** or region includes Lezha, Durrës, Fier, Vlorë prefectures. **Central Area** includes Gjirokastër, Shkodër, Elbasan, Berat, Korçë prefectures; **Mountain Area** includes Kukës and Dibër prefectures; **Tirana area** contains Tirana prefecture.

Table 14 - Poverty by Prefecture 2012

Prefecture	Headcount	Depth	Severity
Berat	12,7	2,4	0,7
Dibër	13,0	2,3	0,7
Durrës	16,2	3,3	1,1
Elbasan	10,7	2,3	0,8
Fier	17,5	3,5	1,1
Gjirokastër	10,7	2,2	0,9
Korçë	12,2	2,5	0,7
Kukës	21,8	3,7	0,9
Lezhë	17,5	4,3	1,6
Shkodër	15,7	3,7	1,6
Tiranë	14,2	2,8	0,8
Vlorë	11,7	2,4	0,8
Total	**14,3**	**2,9**	**1,0**

5. **While Albania's record in boosting shared prosperity was slightly better than other South East European countries in the 2005-2008 period, living conditions of the bottom 40 percent deteriorated following the global financial crisis.** As shown in Figure 7, mean income growth of the bottom 40 percent averaged 2.6 percent in 2005-2008 against 1.3 for the total population. However, in the next four years both the bottom 40 percent and average population saw their incomes fall by 1.2 and 1.3 respectively on an annual basis. Using the results from the LSMS 2012 survey, it is possible to situate the distribution of households at the bottom 40 percent of income by prefecture. The data points to significant income divergence. In the prefecture of Kukës more than half (54 % of households) of households live below the bottom 40 percent of the national income, followed by Dibra and Elbasan where around half of household earn incomes less than the national bottom of 40 percent. Conversely, in Tirana and Vlora fewer than 30 percent of households earn at the bottom of 40 percent of income. Finally, little improvement has been achieved in terms of income equality as, evidenced by the Gini index which has remained virtually unchanged in the last decade (0.29-0.30), suggesting the need for better targeted social assistance and more inclusive policies and infrastructure investments.

Figure 7 - Mean Income growth against Income of B40 and Share of B40 by Prefecture



6. **The existing transport infrastructure deficiencies may be an important driver of poverty in Albania**. The road network in the country is still constrained in both coverage and quality, and suffers from lack of maintenance. Road network constraints are considered one of the main reasons for unequal development of the different regions of the country, and the analysis shows that there is an unequivocal correlation between the quality of road infrastructure of a regions and the level of poverty of its population.

Mobility and Accessibility Constraints in Selected Project Areas

7. **As part of Project preparation, the Bank financed a socio-economic impact assessment aimed at examining some of Albania's more pressing mobility and accessibility needs, particularly for low-income and other vulnerable groups.** This socio-economic study was prepared with funding from the ECAPDEV grant and focused its analysis on the communes of Paper, Shtiqen, and Bucimas[44], located in the central and mountainous regions of the country to ensure a good degree of representativeness of country's future Project areas. While the study does not attempt to quantify real impact of road maintenance on transport or welfare outcomes, it nonetheless provides reliable qualitative and quantitative data on the current socio-economic conditions of the local population, giving indications on how local inhabitants perceive the Project's impact on their local communities, and providing proposals to further promote pro-poverty benefits.

8. **Despite some recent investments in the local and regional road network, the quality of transport infrastructure in Albania remains low and there is considerable regional variation in terms of access to markets and basic services.** The economic infrastructure in the

[44] The selection of three communes was done on the basis of proximity to project roads and district centers, size, residents' occupation, income level, and livelihoods patterns. They present the following similarities: existence of roads, which are supposed to be part of the RRMSP project, population characterized by low income, possibility for adoption of modern agricultural technology, as these communes' economy is predominantly agricultural, and existence of a market within the territory of the commune or in the nearest municipality (up to 10 km) which is the center of rural economic activities.

country tends to be concentrated in the main urban centers while the outer-peripheral sub-regions of the country suffer from significant connectivity and accessibility problems which hinder sustainable and inclusive growth. Transport logistics constraints to getting more products to and from the mountainous and - to a lesser extent - the central areas to the main urban centers and ports have affected the growth in some specific agricultural sectors. In 20002, the rural accessibility index in Albania was 31 percent, against 78 percent in the FYR of Macedonia, 74 percent in Serbia, or 84 percent in Croatia. Poor connectivity not only affects the rural economy and the productivity of small scale farmers in key sectors, but also that poor and vulnerable groups, who not surprisingly tend to reside in the more remote communes of the country, such as Shtiqen and Bucimas.

9. **Insufficient maintenance expenditures and limitations in the management of assets hinder market access for the rural labor force.** Inhabitants of the areas included in the study argued that poor roads negatively affect the ease of movement and access to markets, health and education services. Private transport of goods and people represents an important activity in the three communes as the population commutes every day towards nearest cities, mainly to go to markets and sell their produce. Based on the surveys, focus groups and interviews conducted it was noted that after employment and income, most of the population considered infrastructure problems to be one of the main causes of their economic difficulties and low standard of living. Rural producers in particular, stated that a lack of adequate transportation, primarily good roads, posed one of the greatest constraints related to market access. Consultations with local communities suggest that rural households are flowing to urban centers. This migration could be partially avoided through better condition roads, as one of the main reasons for displacement for these groups is the need for immediate access to markets and quality healthcare and education services.

10. **The quality of service delivery in these areas is low and the less well-off portion of population has limited accessibility to social services, particularly health.** The analysis found that there is continued absence of qualified personnel in health centers so villagers are forced to visiting hospitals located in the nearest towns when seeking for qualified health care. For example, the Commune of Bucimas has one health center in each of its 8 villages but there are there are no hospitals in the commune. This means that inhabitants must travel to Pogradec, the nearest urban district, to receive some healthcare services that are not provided by the local centers. Despite the district being relatively nearby, the continued deterioration ofl road infrastructure affects responses in cases of health emergencies. In winter especially, receiving healthcare services is difficult, as the movement of doctors and nurses is affected by road closures due to flooding and landslides. Due to poor road conditions, residents located far from the district center have reported significant delays in receiving health services and ambulances. In several villages, births are not made in health centers or maternity, and during winter, remote areas are isolated due to road closure (by landslides, water or snow). Well maintained roads could hence improve the reliability of emergency health services improving the life quality of vulnerable groups such as the elderly and people with disabilities, which need particular attention and care.

11. **Educational outcomes could be greatly reduced through the improvement of the existing road network.** Fieldwork carried out in the three communes found that in general pupils from surrounding villages must walk for long distances to reach schools. Their daily

commute usually takes place along dangerous roads walking on roadside, as sidewalks are missing, being often subject to adverse weather conditions. As a result of the long distances, pupils coming from most distant villages arrive in school tired from the long walks, and this may plausibly affect their learning abilities. Similarly, teacher absenteeism in these regions is sometimes related to factors beyond teacher's control such as road usability (unpaved roads and closures in the winter). School directors interviewed as part of the socio-economic assessment reported that teachers could miss between 10 to 5 days of school, and many times this occurred simply because there was no access to the village. Finally, accidents along connecting roads are not uncommon and, as we will see in the next sub-section, have resulted in heavy injuries and fatal consequences, often involving children, as in many cases they have to walk along the national road to go to their schools.

12. **Limited public transport supply and high transportation costs affect people's mobility and access to opportunities outside the villages**. The socio-economic study showed that, while all three communes have high daily movements of residents to other municipalities and/or city centers, they rely on their private means to reach their destination as public transport is very limited or inexistent. However, vehicle ownership is low with about 4 and 8 percent of households owning a car in the communes of Paper and Bucimas and 31 percent in the commune of Shtiqen. Being near urban areas residents travel on a daily basis to adjacent cities for different purposes. Although distances to near cities are relatively short, passengers complain about insufficient frequencies, unaffordable fares and uncomfortable travel conditions. Except for Paper, the other two communes lack any public transport means, forcing dwellers to depend on more expensive transport options or on friends are relatives for their private mobility needs. Similarly, a common concern shared by most car owners is how transport has increasingly become unaffordable consuming up to 30 and 40 percent of household budgets. There is a common perception that deteriorating road conditions have increased vehicle operating costs and hence better and more frequent routine maintenance could have a positive impact on travel cost as well as time needed to reach most frequent destinations. Poor quality of roads increases maintenance expenses and operating costs not only for farmers and rural households, but also for the commercial and industrial sector who find it more costly to procure supplies and deliver outputs. Continued asset management, routine road maintenance, and more reliable access to public transportation could reduce transportation costs bring important benefits to the households, farmers and firms alike.

Poverty and Road Safety: Evidence from the PSIA

13. **Road safety is another critical concern and the relatively high number of injuries in the country undermines income growth of the poor, with devastating consequences for their livelihoods, earnings and prospects for escaping poverty.** Road safety constitutes a major problem for Albania, as the number of accidents with either fatal casualties, serious or light injuries have increased significantly over years. During the last five years fatalities have remained within a band ranging between 300 and 390 per year or equivalent to a rate of between 10 and 12 fatalities per 100,000 persons. This is high by European standards, and the country is aiming to half it by 2020. Main causes for this are the large increase in motorization, the increased driving speed due to an improvement and also extended paved road network throughout the country, the larger number of young and inexperienced drivers, and the lack of periodical checks on roadworthiness of, in particular commercial, vehicles in Albania.

14. **Low-income groups may be particularly vulnerable to the secondary impacts of road trauma, as they may be more vulnerable to deprivations, and lack safety nets in the event that the sole income-generating source is incapacitated following a fatality or an accident.** The medical treatment of a victim, for example, may continue over many years, or even for their entire lifetime. Without a secure and sustainable source of revenue, poor and vulnerable households will have an increasing inability to overcome the trauma. As well as being at increased risk, low-income families are less likely to be insured or able to pay the medical costs associated with disability or injury. A poor household is liable to be driven into debt or destitution by the costs associated with the loss or disability of a bread winner. Injured people often suffer physical pain and emotional anguish that is beyond any economic compensation, since the new health situation can deprive them of the ability to achieve even minor goals and result in dependence on others for economic support and routine physical care.

15. **A Poverty and Social Impact Analysis (PSIA)[45] was carried out to assess the distributional impacts of road fatalities and accidents on the poor, specifically the bottom 40 percent of the income stratum, and other vulnerable groups with a view of widely disseminating the findings and influencing the future Road Safety reform agenda and related measures in Albania.** The PSIA examined the multiple dimensions of this issue, to test whether or not poor road safety outcomes disproportionately affect poor families and individuals, including why poor people and the bottom 40 percent could be more at risk of injury, and why the long term effects could be more socially and economically devastating to them.

16. The PSIA concluded that in Albania the highest burden of injuries and fatalities is borne disproportionately by the poor, as pedestrians, passengers of buses and minibuses, and cyclists. By desegregating the data by income levels, the results indicate that the bottom 40 percent are more at risk, with pedestrians accounting for more than one third of all accidents followed by motorcyclists which account for almost 28 percent. Moreover, those falling into the bottom 40 also have the highest share of fatality and injuries, particularly in rural areas, and this pattern is observed across all age groups. For instance, low-income households accounted for 49 percent of total fatalities in rural areas in 2012 against 11 percent for the upper quintiles, controlling for distance travelled and number of trips. Similarly, by looking at intra-household patterns, heads of households and children within the bottom 40 percent group are more likely to die or get injured in the accident relative to the rest of the population in the sample.

[45] The PSIA was executed between September 2014 and February 2015. The study combines quantitative and qualitative research and data collection techniques aiming at obtaining more general socio-economic and relevant data on the costs of road related deaths and injuries on the family and a comprehensive picture of the impact of trauma and coping mechanisms the household has put in place since the accident occurred, etc. A total of 259 household interviews were conducted with households who have suffered a serious road related injury or fatality in 2012. In addition 6 focus groups discussions with representative of households which had been somehow affected by road violence were conducted in urban and rural areas. The study also included in-depth interviews with government stakeholders, civil society representatives and other interest groups. The study also assessed cost of road accident on country GDP and other macro-level variables.

Table 15 - Number of fatal accidents by road-users, 2009-2013

	2009	2010	2011	2012	2013
Cyclist	8	6	4	4	2
Pedestrian	64	70	66	62	48
Motorcyclist	18	16	13	20	12
Passenger	129	136	150	127	95
Driver	354	301	275	272	273

17. Impact on the household reveales that a substantial percentage of poor bereaved families in Albania suffer a decrease in household income, food consumption and living standard, which goes higher than for non-poor in both urban and rural areas. The majority of these households went into debt after a road death, compared to only one-fourth of urban non-poor families and one-third of rural non-poor families.

Expected Project's contribution to Twin Goals

18. **The importance of road infrastructure for the socio-economic development of a region has been recognized for a long time.** In many developing countries, aging or inadequate transportation networks are a biding constraint to economic growth. Many studies have shown that an extended and improved road network (i.e. primary, secondary and tertiary) can create opportunities for growth and development through multiple channels. Some of these include lowering the costs of transportation as well as the cost of consumption and production of goods and services, boosting farm output through encouraging greater access and use of modern inputs, improving access to markets as well as lowering prices of agricultural inputs and outputs (Khandker, Bakht, & Koolwal, 2009). In the absence of asset management practices and an adequate road maintenance budget to preserve the condition of the existing network, a country's more lagged regions may be adversely affected; they may lose access to national and international markets, see the utilization and access to public and social services like schools and hospitals on behalf of the population largely reduced, and ultimately curtail the number of choices of livelihoods of vulnerable population groups.

19. **The literature on poverty and transport confirms the importance of mobility as a structuring element in the livelihoods of the poor.** However, the evidence tends to examine the direct and indirect effects of road construction and expansion, with relatively scarce evidence on the role of asset management and road safety systems. The anticipated welfare effects for the poor and bottom 40 percent are expected to be similar even if their overall impact will almost certainly be of lesser magnitude. Furthermore, the effects will be largely indirect. However, the Project is expected to result in at least five broad set of positive socio-economic outcomes. First, better road conditions can improve the ability of rural dwellers to diversify their employment options, affect firm location and cluster development, increase income generation opportunities. Second, adequate transport infrastructure and services is critical for household to access to essential and better services in health/education, Third, cheaper transport expands a household's and a firm's consumption/production possibility frontier. Fourth, better mobility can facilitate social capital formation; enhance social ties and enhancing social ties and community life. Fifth, well maintained roads may stimulate the habitat in depressed areas and potentially transform the

built environment of their surrounding regions as firms and households decide to relocate and new business and housing communities arise.

20. **At the most direct level, the RRMSP will create employment opportunities for activities related to road maintenance throughout the country.** This will include not just management level roles, but lower skill roles such as laborers, gangers, plant operators and administration assistants. The Project will provide opportunities in all regions of the country for sustainable sources of employment and income for the poor, especially in rural communities, where the prevalence of poverty is highest. The envisioned routine and periodic maintenance activities are also expected to generate multiplier effects in the local economies. Unlike short-term road construction projects, the maintenance programs that will be initiated under RRMSP is expected to provide long-term jobs, likely to last beyond the Project period.

21. **Indirectly too, the RRMSP Project may, in the medium to longer term improve other welfare indicators for the local population, becoming an important channel for achieving key developmental goals.** Some of these indirect benefits impacts are already anticipated by the households and stakeholders consulted in the context of the socio-economic study. The perceptions and opinions of participants of focus group discussions and household surveys show that maintenance of roads is expected to positively affect social and economic indicators of these areas, and overcome some of the major difficulties they face today in relation to transport infrastructure. Households, firms, and other stakeholders consulted strongly believe that continued road maintenance will bring benefits in terms of market accessibility, increased production volumes and productivity, reduced travel time and costs, reduction of production cost, and improvement of access to health services and education.

22. **Finally, road safety considerations included in Project design are anticipated to have a positive distributional outcome**. The PSIA demonstrated that the majority of road traffic fatalities in Albania are among males who are often the primary breadwinners of low-income households; there is a clear rationale for improving road safety on equity grounds. The costs and impacts due to road crashes are in a higher burden for poor people. The expected road safety interventions envisaged under the Project will not only reduce the number of road related deaths and injuries but could also assist policy makers in determining the appropriate policies to mitigate the impacts and improve poverty alleviation actions. Other than this, comprehensive transportation planning including asset management and routine maintenance could reduce the road crash problem for poor people who are among the main group of road-users in Albania.

Annex 6: Economic Analysis

ALBANIA : Results-based Road Maintenance and Safety Project

1. The Project will finance road preservation works on the Primary (P) and Primary Secondary (PS) roads of Albania. The road preservation works consist of routine and periodic road maintenance, road safety improvement and emergency works. These will: (i) maintain the ride quality of the road network; (ii) reduce surface distress of pavements; and (iii) increase strength of pavements, which will in turn lower vehicle operating costs, travel times, and future maintenance requirements on the Project roads. The definition of the road works program and the assessment of its economic evaluation was supported using the Highway Development and Management Model (HDM-4), which computes, over an evaluation period, the road deterioration of the Project roads under different project-alternatives and the corresponding annual road agency costs, road user costs (vehicle operating costs and travel time costs) and total transport costs over the evaluation period to evaluate the project-alternatives in terms of net present value of benefits (NPV), at a giving discount rate, compared to the without project-alternative. In case of budget constraints, HDM-4 has an optimization algorithm that identifies the work program of capital preservation works (periodic maintenance) that maximizes the NPV of the entire network under the user defined budget constraint.

Overall Network Evaluation

2. The National Network under the jurisdiction of ARA covers the entire extension of the Country. The core road network of National roads connects all major cities and touristic centers and carries the majority of traffic and is composed by the Primary (P) roads and Primary Secondary (PS) roads. The rest of the National network is composed of Secondary (S) and Albanian Development Fund (ADF) roads. The total length of the National Network is 4,288 km[46], which were surveyed in 2014 to determine their basic current characteristics in terms of network class, surface type, road width, condition and traffic. In total, 3,164 km were identified for which road condition and traffic data is available, totaling 490 homogeneous road sections, which include all P (1,053 km) and PS (282 km) roads and the most important S (1,619 km) and ADF (90 km) roads. The remainder of the roads has very low traffic. Table 19 presents the condition of the evaluated network that shows that 83 percent of the overall network, 91 percent of P plus SP networks and 77 percent of the S plus ADF networks are in sustainable condition (very good, good or fair condition) requiring only periodic and routine maintenance.

[46] Primary roads P = 1,167 km (of which 1,053 are part of the project) , Main Secondary (Primary-Secondary) roads PS = 282 km, Secondary roads = 1,619 km, and ADF roads included in the national network ADF = 90 km.

Table 16 - National Road Network with Condition and Traffic Data

Network	Length (km)	(%)	Condition			
			Very Good or Good	Fair	Poor or Very Poor	Average IRI
P	1,167	37%	66%	24%	10%	4.5
PS	235	7%	62%	34%	3%	4.6
S	1,672	53%	38%	37%	25%	6.4
ADF	90	3%	100%	0%	0%	3.5
Total	3,164	100%	52%	31%	17%	5.5

3. The P and PS roads carry most of the traffic of the National roads, with an average daily traffic of 6,695 vehicles per day and carrying 76 percent of the vehicle utilization, while the S and ADF roads have an average traffic of 1,705 vehicles per day and carry only 24 percent of the vehicle utilization despite accounting for 56 percent of the network length (Table 14). The network carries around 4,523 million vehicle-km per year that consumes around 595 million liters of fuel per year resulting on 1.48 million tons of CO2 emissions per year. The Project preservation road works will maintain the current condition of the network and no generated traffic is anticipated, thus, it is expected that the current level of CO2 emissions will not be affected by the Project.

Table 17 - Traffic and Vehicle Utilization

	Traffic		Utilization (million vehicle-km)	
Network	% Network < 1,000 AADT	Average AADT	Utilization (m veh-km/year)	Utilization (%)
P	5%	7,194	3,064	67.7%
PS	31%	4,212	361	6.9%
S	68%	1,757	1,072	24.8%
ADF	100%	751	25	0.7%
Total	43%	3,916	4,523	100.0%

4. The HDM-4 model evaluated a matrix of road classes that represent homogeneous road sections with similar characteristics in terms of road width, surface type, condition and traffic. The evaluation was done based on current vehicle fleet economic unit costs and basic characteristic (Table 15). On average, the percent of cars and pickups is percent of the vehicle fleet. The evaluation adopted: (i) an annual traffic growth rate of 4.0 percent per year for all vehicles, considering that the estimated annual GDP growth from 2014 to 2019 by the IMF for Albania is 3.8 percent per year; (ii) a discount rate of 5.5 percent; and (iii) an evaluation period of 20 years.

Table 18 - Vehicle Fleet Economic Unit Costs and Basic Characteristics

	Car	Pickup	Small Bus	Medium Bus	Small Truck	Medium Truck	Heavy Truck	Artic. Truck
Economic Unit Costs								
New Vehicle Cost (EUR/vehicle)	20000	24000	48000	100000	24000	48000	68000	104000
New Tire Cost (EUR/tire)	36	44	44	104	44	80	104	164
Fuel Cost (EUR/liter)	0.69	0.58	0.58	0.58	0.58	0.58	0.58	0.58
Lubricant Cost (EUR/liter)	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
Maintenance Labor Cost (EUR/hour)	4.50	4.50	6.40	6.40	4.50	6.40	6.40	8.90
Crew Cost (EUR/hour)	2.20	2.20	2.90	2.90	2.20	2.90	2.90	3.50
Overhead (EUR/year)	518	1170	1233	2858	1233	1517	1517	2333
Interest Rate (%)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Working Passenger Time (EUR/hour)	2.23	2.23	2.23	2.23	0.00	0.00	0.00	0.00
Non-working Pass. Time (EUR/hour)	0.88	0.88	0.88	0.88	0.00	0.00	0.00	0.00
Cargo Delay (EUR/hour)	0.00	0.00	0.00	0.00	0.07	0.15	0.22	0.30
Basic Characteristics								
Kilometers Driven per Year (km)	10000	30000	30000	40000	30000	40000	45000	45000
Hours Driven per Year (hr)	400	1200	1200	1750	1400	1750	2100	2100
Service Life (years)	16	20	8	25	20	25	25	25
Percent Private Use (%)	100	0	0	0	0	0	0	0
Number of Passengers (#)	2	6	12	25	0	0	0	0
Work Related Passenger-Trips (%)	75	75	75	75	0	0	0	0
Gross Vehicle Weight (tons)	1.20	1.80	2.50	8.00	2.50	8.00	13.00	24.00
Equivalent Standard Axels (ESA)	0.00	0.00	0.04	0.70	0.10	1.25	1.25	4.63
Typical Traffic Composition (%)	67	7	2	2	13	3	3	3

5. The table below presents the resulting unit road user costs (vehicle operating costs plus travel time costs), in Euro per vehicle-km, for different roughness levels.

Table 19 - Unit Road User Costs Function of Roughness (EUR per vehicle-km)

Roughness (IRI, m/km)	Car	Pickup	Small Bus	Medium Bus	Small Truck	Medium Truck	Heavy Truck	Artic. Truck
2.0	0.311	0.367	0.763	1.231	0.249	0.437	0.974	0.989
2.5	0.312	0.367	0.763	1.233	0.249	0.437	0.976	0.991
3.0	0.313	0.368	0.765	1.239	0.251	0.437	0.984	0.999
3.5	0.315	0.373	0.771	1.258	0.257	0.437	1.010	1.025
4.0	0.318	0.377	0.779	1.278	0.263	0.437	1.037	1.052
4.5	0.320	0.382	0.788	1.298	0.269	0.437	1.063	1.077
5.0	0.324	0.387	0.799	1.319	0.275	0.437	1.088	1.102
5.5	0.327	0.392	0.813	1.341	0.281	0.437	1.113	1.126
6.0	0.331	0.398	0.829	1.364	0.287	0.437	1.137	1.149

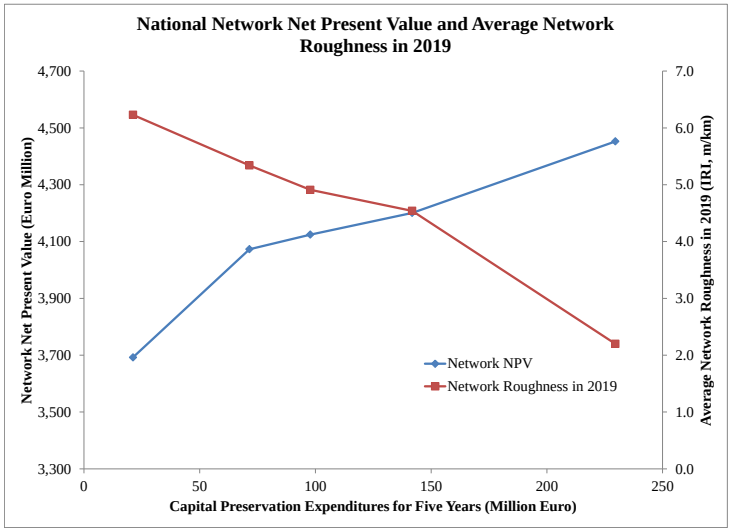
6. The table below presents the financial unit rates of the capital preservation works evaluated with HDM-4. The economic costs, net of taxes, are 83% of the financial costs.

Table 20 - Capital Preservation Works Unit Rates

Road Work	Unit	Financial Cost (EUR)
Thin Overlay (4cm)	m2	7.5
Structural Overlay (8 cm)	m2	14.2
Reconstruction (Milling & Replace)	m2	25.0

7. The initial HDM-4 evaluation, covering the entire network identifies that under an unconstrained budget scenario, the capital preservation expenditures, for periodic maintenance, required to preserve the network and fully eliminate the periodic maintenance backlog during the 2015-2019 period amounts to EUR 230 million, of which 54 percent is allocated to the P and PS networks. Under this scenario the average network roughness decreases from the current 5.5 IRI to 2.2 IRI in 2019, yielding a NPV of EUR 4,453 million. The evaluation considered budget constraint scenarios of EUR 30, 20, 15 and 5 million per year for 2015-2019. Figure 8 below presents the overall network NPV and the average network roughness in 2019 function of the budget constraint scenarios.

Figure 8 - National Network Net Present Value and Average Network Roughness in 2019



8. Under the current fiscal conditions of Albania, the proposed unconstrained budget work program cannot be implemented due to the limited funds available for capital preservation works. Considering that the overall budget made available by the Project is EUR 128.47 million (US$ 156 million equivalent), and much less than what was anticipated, ARA decided to focus the Project on the P and PS networks, while the remaining roads (S and ADF) would be left outside of the Project and be maintained with other sources of financing. The available amount

allocated by the Project to capital preservation works results to be around EUR 26 million, for the 5-year contract period.

Core Road Network (P and PS roads) Evaluation

9. Based on the funds available from the Project for capital preservation works, during the 2015-2019, for the P and PS roads, the HDM-4 optimization was used to identify the optimized road work per homogeneous road section and its optimal timing and computed the required economic indicators. Under the proposed contract arrangements, the contractors will define the road works to be done on each road section; thus, the HDM-4 evaluation provided indicative figures of the economic justification of the Project.

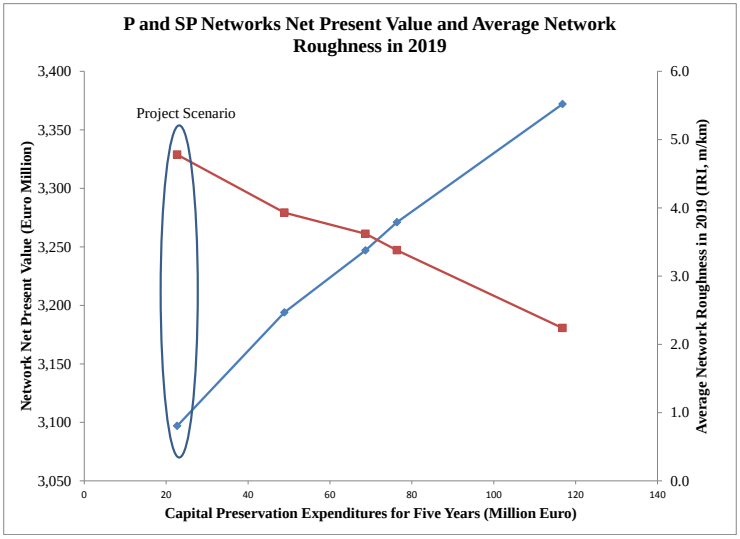
10. The P and PS networks currently have an average roughness of 4.5 IRI, m/km, carry 3,426 million vehicle-km and have an average daily traffic of 6,695 vehicles per day. The table below presents the distribution of the networks length by traffic and condition. Half of the network length carries between 1,000 and 5,000 vehicles per day and 91 percent is in very good, good or fair condition.

Table 21 - P and PS Networks Characteristics

Traffic	**Length**		**Road**	**Length**	
Range (AADT)	**(km)**	**(%)**	**Condition**	**(km)**	**(%)**
<1000	131	9%	Very Good	299	21%
1000-2500	276	20%	Good	618	44%
2500-5000	416	30%	Fair	364	26%
5000-10000	305	22%	Poor	37	3%
10000-20000	210	15%	Very Poor	85	6%
20000-30000	51	4%			
>30000	13	1%			
Total	**1,402**	**100%**	**Total**	**1,402**	**100%**

11. The HDM-4 evaluation shows that the unconstrained budget scenario requires EUR 117 million, over the next five years, for capital preservation works only, reducing the average network roughness in 2019 to 2.2 IRI (m/km).

Figure 9 - P and PS Networks Net Present Value and Average Network Roughness in 2019 (Unconstrained Budget)



12. Considering a constrained budget of EUR 23 million, the evaluation shows that 20 percent mounting to EUR 4.6 million should be allocated to pavement periodic maintenance works on roads in poor condition (61 km) and 80 percent mounting to EUR 18.4 million to periodic maintenance work on roads in fair condition (346 km) over the next five years. Under this constrained budget scenario: (i) the average network roughness of the P and SP networks will remain at the same level as the 2014 level (around 4.5 IRI, m/km) over the next five years; (ii) the present value of the capital preservation works costs over the evaluation period is EUR 42.8 million; (iii) the NPV is EUR 830 million; and (iv) the benefit cost ratio is 19.4. The return on the investments is highly satisfactory with an Economic Internal Rate of Return (EIRR) of 169 percent, as expected for road preservation works on high traffic roads.

Contract Packages Evaluation

13. Based on the P and SP networks strategic evaluation under budget constraints, four contract packages were defined to be financed under the Project. The table below presents the length of the contract packages that total 1,335 km, of which 41 percent (554 km) require capital preservation road works.

Table 22 - Contract Packages Length

	Network Length (km)			Pavement Capital Works	
Contract	P	PS	Total	(km)	(%)
A	216	73	289	139	48%
B	242	58	300	119	40%
C	282	94	376	103	27%
D	314	57	371	193	52%
Total	1,053	282	1,335	554	41%

14. The table below presents the distribution of the network by current condition. Overall 90 percent of the network is in sustainable condition.

Table 23 - Contract Packages Current Condition (km)

Contract	Very Good	Good	Fair	Poor	Very Poor	Total	Sustainable Condition (%)
A	18.3	135.8	96.7	30.0	8.2	289.0	87%
B	25.7	168.3	26.4	14.0	65.7	300.0	73%
C	153.3	136.5	70.8	9.2	5.9	375.6	96%
D	17.0	189.3	159.6		4.8	370.7	99%
Total	214.3	629.8	353.4	53.2	84.6	1,335.2	90%
Percent	16%	47%	26%	4%	6%	100%	

15. The total required funding for capital preservation works was estimated to be EUR 28.5 million that is 35 percent of the total funding needed for the contracts (EUR 81.5 million). The table below presents the estimated total costs per package broken down by activities.

Table 24 - Contract Packages Costs (EUR million)

Contract	Restoration Road Works*	Capital Preservation Works	Routine Maintenance	Repair of Bridges	Emergency Maintenance	Total
A	2.6	6.6	7.9	0.7	2.2	20.1
B	1.9	6.8	8.3	0.9	1.6	19.5
C	1.8	5.4	9.1	0.9	1.2	18.5
D	1.6	9.7	9.4	0.9	1.8	23.4
Total	7.9	28.5	34.6	3.5	7.0	81.5

* restoration road works are non-pavement rehabilitation road works

16. The table below presents the estimated average traffic, network utilization, performance of the contracts in terms of average roughness, and economic indicators. For the four contracts, the evaluation shows: (i) 28 percent (EUR 8.32million) should be allocated to pavement periodic maintenance works on roads in poor condition and 61 percent (EUR 17.8 million) to periodic maintenance work on roads in fair condition over the next five years; (ii) the average network condition will remain around at the same level as the 2014 condition over the next five years; (iii) the present value of the capital preservation works costs over the evaluation period is EUR 35.5 million; (iv) the NPV is EUR 840 million; and (v) the benefit cost ratio is 23.6. The return on the investments is highly satisfactory with an Economic Internal Rate of Return (EIRR) of 135 percent, as expected for road preservation works on high traffic roads. An increase of Project costs by 20 percent together with a decrease in benefits by 20 percent decreases the EIRR to 109 percent.

Table 25 - Contract Packages Performance and Economic Indicators

Contract	Average AADT	Utilization (m veh-km/year)	Roughness (IRI) 2014	Roughness (IRI) 2019	NPV (M Euro)	EIRR (%)
A	8,249	852	5.0	5.0	90	85%
B	6,089	644	4.8	5.7	214	95%
C	6,960	881	3.6	4.1	135	168%
D	4,391	546	4.2	3.5	401	177%
Total	6,355	2,923	4.3	4.5	840	135%

Public Sector Financing and World Bank Added Value

17. Public sector financing is the appropriate vehicle for financing the preservation of the Project roads because the large periodic maintenance costs cannot be recovered through tariffs. Public investment in road infrastructure is a way the government plays a key role in the country's development by handling a range of issues that can only be accomplished or implemented through government actions, such as road asset management, setting up road maintenance standards, addressing road safety issues and controlling axle loads.

18. The World Bank's role is justified because of the Project's economic and social benefits and because of the value added it brings beyond financing in areas such as: construction quality control, sustainability of road maintenance, road safety, transport planning, and environmental risk, safeguards, procurement, and financial management.

Annex 7: Project Location Map

ALBANIA: Results-based Road Maintenance and Safety Project

Road ID	Road Name	Contract Length (km)
SH1-N	Tiranë - Hani i Hotit (New)	132.43
SH2	Tiranë - Durrës (Autostrada)	32.50
SH3	Elbasan - Kapshticë	156.01
A3	Tiranë - Elbasan (New motorway)	36.84
SH4-N	Durrës - Fier (New)	78.20
SH4-O	Tepelenë - Kakavijë (Old)	82.90
SH4-N	Levan - Tepelenë (New)	77.71
SH5	Shkodër - Kukës	138.41
SH6	Milot - Skuraj - Peshkopi	117.90
SH7	Elbasan - Rrogozhinë	44.49
SH8	Fier - Vlorë	0.34
SH8	Pusi Mesinit - Sarandë	121.80
A2	Levan - Vlorë (New part of SH8)	24.61
SH9	Qafë Thanë - Doganë	3

Road ID	Road Name	Contract Length (km)
SH32	Lezhë - Shëngjin - Kunë	11.40
SH41	Ura e Bunës - Muriqan	13.90
SH44	Jun. Road Nr.6 - Doganë Blladë	3.35
SH52	Vorë - K/Rinas - F. Krujë	11.50
SH60	Kryqëzim Rinas - Rinas - Qafë Kashar	9
SH64	Pogradec - Tushemisht	5.90
SH72	Lushnje - Berat - Çorovodë	87.98
SH85	K/Shkozet - Plepa	8.30
SH97	Ura e Kranesë - Konispol (Q. Botë)	33
SH99	Sarandë (Ura e Gajdarit) - K/Qafë Muzinë	22
208	Tamarë - Vermosh	35
22	Qafë Malì - Qafë Morinë	16.66
28	Melgushë (K - Mjedë	7.10
218	Maminas - Hamallaj - ShenPjeter	23
Total		1.335,23 km

GSDPM Map Design Unit

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