

**FRAMEWORK FINANCING AGREEMENT
(North–South Road Corridor Investment Program)**

Parties	This Framework Financing Agreement (“FFA”) dated _____ September 2009 is between the Republic of Armenia (“Armenia”) and Asian Development Bank (“ADB”).
MFF Investment Program	<p>Armenia is committed to and will implement improvement subregional road corridors, which is integral part of the <i>Investment Program for Roads Development in Armenia</i> (the Program) and road subsector.</p> <p>The total cost of the Program over the period 2009 to 2017 is expected to be \$1,453 million equivalent.</p>
Multitranche Financing Facility	<p>The Multitranche Financing Facility (the Facility or MFF) is intended to finance projects under the Investment Program, provided that such projects comply with the criteria set out in Schedule 4 hereto and that understandings set out in this FFA are complied with.</p> <p>The projects under the facility may include: (i) construction, upgrading, and rehabilitation of roads within Armenia's national boundaries; (ii) construction, modernization and rehabilitation of Armenia's border and customs infrastructure and/or facilities; (iii) policy and institutional support to implement road subsector development plan, and (iv) institutional support to implement efficient border and customs clearance procedures.</p>
This Framework Financing Agreement	<p>This FFA does not constitute a legal obligation on the part of ADB to commit any financing. At its sole discretion, exercised reasonably, ADB has the right to deny any financing request made by Armenia, cancel the uncommitted portion of the Facility, and withdraw Armenia's right to request any financing tranche under the Facility. Financing tranches may be made available by ADB provided matters continue to be in accordance with the general understandings and expectations on which the Facility is based and which are laid out in this FFA.</p> <p>This FFA does not constitute a legal obligation on the part of Armenia to request any financing. Armenia has the right not to request any financing under the Facility. Armenia also has the right at any time to cancel any uncommitted portion of the Facility.</p> <p>Armenia and ADB may exercise their respective rights to cancel the Facility or any committed portion thereof, and ADB may exercise its right to refuse a financing request, by giving written notice to such effect to the other parties. The written notice will provide an explanation for the cancellation or refusal and, in the case of a cancellation, specify the date on which the cancellation takes effect.</p> <p>This FFA will enter into force upon notice from Armenia to ADB on the fulfillment of intergovernmental procedures for entering into force in accordance with Armenia's applicable legislation, but not later than effectiveness of the loan agreement for tranche 1 project.</p>

Financing Plan

The indicative financing plan for the Program for the period 2009-2017 is summarized below. Details are set forth in Schedule 1 to this FFA.

Source	Total (\$ million)	%
Investment Program		
Asian Development Bank		
Ordinary Capital Resources	440.0	46
Special Fund Resources	60.0	6
Japan International Cooperation Agency	70.0	7
Government and other cofinanciers	392.0	41
Total	962.0	100
Tranche 1 Project		
Asian Development Bank		
Special Fund Resources	60.0	85
Government	10.0	15
Total	70.0	100

Financing Terms

ADB will provide loans to finance components under the Investment Program, as and when the latter are ready for financing, provided, Armenia is in compliance with the understandings hereunder, and the components are in line with those same understandings. Each loan will constitute a tranche under the Facility.

Each tranche may be financed under terms different from the financing terms of previous or subsequent tranches. The choice of financing terms will depend on the project, capital market conditions, and ADB's financing policies, all prevailing on the date of signing the legal agreement for such tranche. Tranches may be provided in sequence or simultaneously, and some may overlap in time with each other. There is no maximum or minimum size for a tranche.

Commitment charges or guarantee fees are not payable on the Facility. They are payable only on financing actually committed by ADB as a loan or guarantee. ADB rules on commitment charges and guarantee fees, which are in effect when the legal agreements are signed for a tranche, will apply with respect to such tranche.

Amount

The maximum financing amount available under the Facility is Five Hundred Million dollars (\$500,000,000). It will be provided in individual

¹ Provisions of the Ordinary Operations Loan Regulations applicable to LIBOR-Based Loans Made from ADB's Ordinary Capital Resources, dated 1 July 2001, would apply to each such Loan, subject, to modifications, if any, that may be included under any Loan Agreement (said Ordinary Operations Loan Regulations, as so modified, being hereinafter called the OCR Loan Regulations).

² Provisions of the Special Operations Loan Regulations applicable to Loans Made by ADB from its Special Funds Resources, dated 1 January 2006, would apply to each such Loan, subject, to modifications, if any, that may be

tranches from ADB's ordinary capital resources¹ and Special Funds resources² in the following manner:

Loans	
Special Funds Resources	\$60 million
Ordinary Capital Resources	\$440 million

Availability Period

The last date on which any disbursement under any tranche may be made will be 31 December 2017. The last financing tranche is expected to be executed no later than 31 December 2017.

Terms and Conditions

Armenia will cause the proceeds of each tranche to be applied to the financing of expenditures of the Program, in accordance with conditions set forth in this FFA and the legal agreements for each tranche.

The loan proceeds under the Facility will be used to finance road subsector projects, for which eligibility and approval criteria are set out in Schedule 4 to this FFA.

Execution

The Executing Agency for the North–South Road Corridor Investment Program will be the Ministry of Transport and Communication (MOTC) assisted by Armenian Road Directorate (ARD) as the Implementing Agency. The Executing Agency will implement the Program in accordance with the principles set forth in Schedule 1 to this Agreement, and as supplemented in the legal agreements for each tranche.

Periodic Financing Request

Armenia may request, and ADB may agree, to provide Loans under the Facility to finance the Investment Program and its related projects upon the submission of a Periodic Financing Request (PFR). Armenia should submit each PFR. Armenia will make available to MOTC, the proceeds of the tranche in accordance with the related PFR, and the legal agreements for the tranche.

Each individual tranche will be for an amount of no less than Fifty Million Dollars (\$50 million), or its equivalent. ADB will review the PFRs and, if found satisfactory, prepare the related legal agreements.

The component for which financing is requested under the PFR will be subject to the selection criteria set out in Schedule 4 hereto, satisfactory due diligence, and preparation of relevant safeguard and fiduciary frameworks and other documents. ADB and Armenia will agree on a Facility Administration Manual and a schedule to initiate these activities, as soon as possible after the date of this Agreement, but prior to the effective date of the legal agreements for the first tranche.

included under any Loan Agreement (said Special Funds Loan Regulations, as so modified, being hereinafter called the SF Loan Regulations and, collectively with the OCR Loan Regulations, the Loan Regulations).

Until notice is otherwise given by Armenia, the Ministry of Economy will be Armenia's authorized representative for purposes of executing PFRs.

**General
Implementation
Framework**

The Facility will be implemented in accordance with the general Framework set out in Schedule 3 hereto.

Procedures

Tranches to be provided under the Facility will be subject to following procedures and undertakings:

- (i) Armenia will have notified ADB of a forthcoming PFR in advance of the submission of the PFR.
- (ii) Armenia will have submitted a PFR in the format agreed with ADB.
- (iii) ADB may, in its sole discretion, decline to authorize the negotiation and execution of any legal agreement for a tranche.
- (iv) If ADB confirms acceptance of the PFR, the legal agreements will be negotiated and executed by the parties.

PFR Information

The PFR will substantially be in the form attached hereto, and will contain the following details:

- (i) Loan, amount;
- (ii) Description of components to be financed;
- (iii) Cost estimates and financing plan;
- (iv) Implementation arrangements specific to the components
- (v) Confirmation of the continuing validity of and adherence to the understanding in this Agreement;
- (vi) Confirmation of compliance with the provisions under previous Loan(s) Agreement(s)], as appropriate; and
- (vii) Other information as may be required under the Facility Administration Manual, or reasonably requested by ADB.

Safeguards

Attached as Schedule 5 are references to the Safeguard Frameworks that will be complied with during the implementation of the Facility.

ADB's Safeguard Policies, namely: (i) the Involuntary Resettlement Policy (1995), (ii) the Environment Policy (2002), and (iii) the Indigenous Peoples Policy (1998) or (iv) the Safeguard Policy Statement (2009), as the case may be, will be applied with respect to the projects/components financed under a financing tranche.

Procurement

All goods and services to be financed under the Facility will be procured in accordance with ADB's *Procurement Guidelines* (2007, as amended from time to time).

**Advance
Contracting and
Retroactive
Financing**

Under each tranche, ADB may, subject to its policies and procedures, allow on request (a) advance contracting of detailed design and construction supervision and (b) retroactive financing of eligible expenditures up to 20% of proposed individual loan, incurred prior to loan effectiveness but not earlier than 12 months before the date of signing of

the related legal agreement. Armenia acknowledges that any approval of advance contracting and/or retroactive financing will not constitute a commitment by ADB to finance the related project.

Consulting Services

All consulting services to be financed under the Facility will be procured in accordance with ADB's *Guidelines on the Use of Consultants* (2007, as amended from time to time).

Disbursements

Disbursements will be made in accordance with ADB's *Loan Disbursement Handbook* (2007, as amended from time to time).

In projects where land acquisition and involuntary resettlement are required, no loan proceeds shall be disbursed for civil works until ADB has received the Armenia Government's certification, in form and substance satisfactory to ADB, that (i) the Government has allocated adequate funds for land acquisition to relevant project account, and (ii) all land and rights-of-way required for the civil works are free and clear from any and all rights or claims of third parties and any other encumbrances whatsoever.

Monitoring, Evaluation, and Reporting Arrangements

Monitoring and reporting requirements are described in Schedule 3. For each component, a quarterly progress report shall be prepared by the Program Management Unit (PMU) with ARD, which will be submitted to ADB through MOTC. A project completion report for each component shall be prepared in agreed format by PMU not later than 3 months after component completion of each individual tranche.

Project implementation milestones and targets with regards to contracts awards and disbursement will be developed and agreed upon during the inception mission for relevant projects/subprojects and Armenia will ensure that relevant Project Executing Agency(ies) meet such implementation milestones and targets.

With the second PFR, the PMU will submit a compliance report confirming the continued validity and the adherence to Provisions of FFA and Previous Agreement on each component.

Undertakings

Schedule 6 hereto sets out the undertakings provided by Armenia in relation to the Facility.

ARMENIA

ASIAN DEVELOPMENT BANK

By _____
Authorized Representative

By _____
JUAN MIRANDA
Director General
Central & West Asia Department

SCHEDULE 1

MFF CONSTITUENTS

A. Sector Challenges

1. Armenia has experienced turbulent conditions since independence. This affected the roads subsector that has undergone all the pressures and constraints associated with movement from central planning to near market orientation. Within this context the subsector faces development challenges, physical as well as nonphysical. The physical challenges are: (i) degraded state and substandard technical standard of road network, especially subregional corridors; and (ii) underused and dilapidated infrastructure at the international borders. The nonphysical challenges are: (i) limited institutional capacity to deliver the expanded roads development program; (ii) insufficient road maintenance funding; (iii) lack of human resources and action plan to develop such resources; (iv) weak construction industry and outdated design and construction standards; (v) deteriorating road safety record; and (vi) constrained international trade associated with border inefficiencies.

B. Strategic Context

1. Physical Infrastructure

2. The road network is deteriorated and extremely variable in quality. Before 2003, investment in road and maintenance was negligible. This has increased somewhat since then, but significant parts of the total road length are in a very poor state. In 2008, about 4% of the interstate network and 30% of republican roads are reported in a poor state of repair.

3. There was unrestricted access to other areas of the Caucasus within the former Soviet Union. Routes to Turkey and Iran were less developed and the transport-intensive supply network disintegrated after independence. Transit through Armenia almost ceased to exist, infrastructure at the borders dilapidated and border operations became inefficient.

4. The Investment Program aims to intensify regional trade through investment in road and border infrastructure. It will require substantial investment to improve it. The estimated medium-term investment up to 2020 is estimated at about \$1.5 billion. The indicative Investment Plan is in Table 1. The Parties will use its best efforts to attract funding for the Investment Program, including public-private partnership initiatives.

2. Nonphysical Infrastructure

5. Institutional capacities within MOTC and ARD are gradually building up. At the 'macro' level, both institutions operate effectively; yet there are a range of institutional, technical, financial and operational constraints that demand urgent attention to fully utilize the benefits of the Investment Program and convert them into sustainable gains. Constraints are (i) shortage of financing for road maintenance and operations; (ii) absence of adequate planning and training of human resources integrated with universities programs and curriculum; (iii) lack of competitive and efficient construction industry; (iv) lack of competitive consulting engineers; (v) inadequate and outdated design, construction and pricing standards; and (vi) absence of road asset management and monitoring mechanisms. A comprehensive strategy to address these

issues was prepared under the ADB financed technical assistance.³ The Investment Program will help implement the Road Subsector Plan under the Transport Sector Strategy (the Strategy).

6. Shortage of financing for the road subsector will impact the sustainability of the assets now being rehabilitated and/or reconstructed. The cost of overlay program ranges from \$20 million to \$46 million annually. This program is heavily underfunded and new sources of funding need to be found. Stable and secure funding is required, including application of the “user pays” principle through the introduction of a transparent and autonomous road fund.

7. Institutional capacity within MOTC and ARD lack adequate management and technical skills, systems, and procedures. Retaining the talented staff is a challenge and there are no programs that link industry with the engineering universities to supply needed human resources for the road subsector. With the planned investments (over \$1 billion in the medium-term), the workload will increase, particularly as the entire road network undergoes improvement. This should prompt investments in developing the human resources and a clear action plan to train road engineers, economists and other related professionals to international professional standards.

8. The construction industry in Armenia is fragmented and weak but gradually building its capacity through donor funded roads and highways programs. However, there are no domestic contractors with the resources to tackle large scale contracts. International contractors have not worked in Armenia so far and alliances with international groups have not yet been tried. The contractors' equipment and technologies are outdated and inefficient. In addition, bitumen and prefabricated concrete elements for road construction are imported, posing additional challenges to the road construction industry. Cement for construction, however, is abundant in Armenia and exported in substantial volumes.

9. Design, construction and pricing standards for civil works in Armenia are outdated and do not comply with international best practices and standards. Inherited from former Soviet Union standards, they are not based on economy and efficiency, and unit prices are derived from price schedules of 1970-80s with almost no competition driven costs. The geometric designs are based on the technical classification of the road (category I to V) without due regard to its function (trunk road or rural road) and construction specifications are not adjusted to modern road construction equipment. All of these contribute to high construction costs together with inefficient and outdated stock of construction equipment employed by the local contractors.

10. Road asset management needs to be introduced to capitalize on the intensifying road improvement program in Armenia. ARD maintains a road inventory and traffic database. Highway Design and Maintenance Model (HDM-4) is used to prioritize the maintenance program. This platform will have to be expanded to introduce fully integrated pavement and bridge management systems.

C. Policy Framework

11. The Government's short- to medium-term policy priorities in the road subsector are to: (i) define and start implementation of a roads development strategy; (ii) mobilize needed financial, technical and human resources to support the implementation of the strategy; (iii) strengthen policymaking and planning roles of institutions; (iv) develop capacities of road subsector

³ ADB. 2007. Piggybacked to Loan 2351-ARM: Rural Road Sector Project. TA 4973-ARM Transport Sector Strategy

institutions for efficient road management; (v) improve the worsening road safety situation; (vi) establish a legal and regulatory framework for the private sector to participate in road network development, financing, maintenance and operation; and (vii) facilitate cross-border trade and transport through improved border infrastructure and border crossing procedures. The sector roadmap was developed in line with this policy framework.

D. Investment Plan and Sector Roadmap

12. The *Armenia Transport Sector Development Strategy 2020* prepared an investment plan for the road subsector. Priority investments were identified to improve the interstate and rural road network during 2010-2020 at the estimated cost of \$1.453 billion. The investment components of the plan will construct, upgrade, and rehabilitate approximately 1,460km of roads, comprising 620km of subregional road corridors and 840km of rural road network. The noninvestment component will focus on priority reforms, including the development of regulations and operational procedures; encouragement of private sector participation in construction and maintenance; and capacity building for planning, monitoring, evaluation, and reporting. Most of this will be financed from development aid assistance along with Government budgets. The Government has sought external financing, with ADB, the World Bank, Japan International Cooperation Agency (JICA), European Bank for Reconstruction and Development, and the European Investment Bank as the main sources. The indicative Investment Plan is shown in Table 1 and sector roadmap is in Table 2.

Table 1: Indicative Investment Plan (2010–2017)

Road and Section	Length (km)	Cost (\$ million)	Financing	Status	Completion
1. North–South Corridor M-1					
Bavra–Gyumri N.	38	50	ADB	FS	2016
Gyumri Bypass	20	62	ADB	FS	2015
Gyumri–Mastara	40	104	ADB	FS	2014
Mastara–Ashtarak	48	138	ADB	FS	2014
Ashtarak–Yerevan	18	43	ADB	Loan	2013
Total	164	397			
2. North–South Corridor M-2					
Yerevan–Yeraskh *	50	6	ADB	FS	2014
Yeraskh– Goris *	173	52	ADB/WB	FS	2013
Goris–Kapan Alternative Route	75	290	ADB	FS	2011
Kapan–Iran Border	83	40	ADB	FS	2016
Total	381	388			
3. M-3: Georgia–Vanadzor–Turkey					
Spitak–Ashtarak	22	50	WB	Loan	2013
4. M-6 Vanadzor–Alaverdi–Georgia					
Vanadzor–Alaverdi	45	49	WB	Loan	2013
Alaverdi–Georgia	8	9	WB	Loan	2013
Total Interstate Roads	620	893			
5. Rural Roads Program					
Rural Roads Sector Project	227	66	ADB	In progress	2010
Lifeline Roads 2009	100	25	WB	In progress	2011
Rural Roads 2009	140	36	WB	Loan 2009	2011
Rural Roads Project	100	120	JICA	Review	2015
Government	273	54	Budget	Review	2013
Total	840	301			
Taxes and duties		239			
TOTAL Investments plus Government taxes		1,433			
1. Implementation of Road Sector Plan		10	ADB		
2. Implementation of Road Safety Strategy		10	Government		
TOTAL Noninvestment Components		20			
GRAND TOTAL		1,453			

ADB = Asian Development Bank, FS = feasibility study, JICA = Japan Agency for International Cooperation, WB = World Bank.

* with alternative alignment options

Table 2: Road Subsector Roadmap 2010–2017

Objective	Impact	Performance Target	Measurement	Responsible Party
Road network development	An efficient, safe, and affordable network meeting the needs of Armenia and the subregion	Road subsector strategy for roads endorsed in 2010 and set for implementation 620km interstate roads and 1,200km rural roads are improved by 2017 Interstate roads are built to 100km/hr operating speed Average road roughness on rural roads brought to below 5m/km IRI Road accident fatality rates reduced 10% annually Road safety audit incorporated in all main road improvement works by 2017 Road projects comply with accepted environmental safeguards and impact mitigation requirements Road projects comply with accepted social safeguards and impact mitigation requirements	MOTC data, measurements of travel time and road condition Statistics from NRSC and Traffic Police	All concerned government agencies MOF/MOE for budget allocation MOTC/ARD for implementation and compliance with social, environmental and road safety requirements
Road improvement and sustainable maintenance	Extended life of investments and road network	Average condition of roads rated "good" surpass 80% by 2017 Average condition of roads rated "poor" brought to less than 10% by 2017 Performance-based maintenance contracts extended to all road maintenance activities Budget for routine maintenance is kept at \$5,000-7,000 per km for interstate roads adjusted for inflation Budget of \$10 million for annual periodic of road maintenance activities is achieved	Road condition surveys MOTC statistics and contracts MOF and other government statistics	MOF/MOE MOTC/ARD

Revenue generating mechanisms through tolling and/or shadow tolling introduced by 2017				
Improve road subsector planning and management	An efficient planning and management capacity of road subsector agencies	<p>Economic appraisal and planning unit established under MOTC/ARD and staff is trained by 2010</p> <p>Social and environmental compliance unit established under MOTC/ARD and trained by 2010</p> <p>National road subsector human resource strategy and action plan adopted and programs with universities launched by 2012</p> <p>New national road design and construction standards introduced by 2014</p> <p>Automated traffic monitoring, safety monitoring and axle weight control system introduced by 2014</p> <p>Road asset management system is introduced and fully implemented by 2015</p> <p>National Road Safety Strategy implemented fully by 2015</p> <p>Advanced financial management systems and methodologies introduced and staff trained by 2015</p>	MOTC/ARD reports Other government agency reports	MOTC/ARD/ National Road Safety Council

SCHEDULE 2

DESIGN AND MONITORING FRAMEWORK FOR THE FACILITY

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>Impact Increased subregional trade and accelerated economic development in Armenia</p>	<p>Increase in Armenia's exports from \$300 million in 2007 to \$600 million in 2017</p> <p>Increase in Armenia's imports from \$1.1 billion in 2007 to \$2 billion in 2017</p>	<p>National economic and trade statistics</p> <p>Customs statistics</p> <p>Statistics from other international organizations</p>	<p>Assumptions</p> <ul style="list-style-type: none"> Continued Government commitment to regional cooperation Implementation of the Transport Sector Strategy as planned <p>Risk</p> <ul style="list-style-type: none"> Macroeconomic instability in Armenia and the subregion due to the current global economic crisis
<p>Outcome Efficient, safe, and sustainable transport on the north-south road corridor</p>	<p>Increased transit traffic across Armenia on the north-south road corridor from few in 2009 to about 200 vehicles a day in 2017</p> <p>Increased cross-border traffic on the north-south road corridor from 4.6 billion ton-km in 2008 to 10 billion ton-km in 2017</p> <p>Reduced travel time along the north-south road corridor to 2 days by 2017 from 3-4 days in 2008</p> <p>Increased average daily traffic on the north-south road corridor to 6,000 vehicles in 2017 from 3000 vehicles in 2008</p> <p>About 3 million people benefit from the Investment Program</p>	<p>Program and tranche completion reports by the Government and the financiers</p> <p>Program and tranche progress reports</p> <p>National and MOTC traffic statistics</p>	<p>Assumptions</p> <ul style="list-style-type: none"> Other aid agencies' support for the north-south road corridor development The Government's implementation of sustainable road maintenance <p>Risks</p> <ul style="list-style-type: none"> Worsening situation with current land access to Armenia
<p>Outputs 550 km north-south road corridor improved</p>	<p>550-km road upgraded to 100km/hr operation standard</p> <p>International roughness</p>	<p>Investment Program and tranche progress and completion reports</p> <p>Investment Program and</p>	<p>Assumptions</p> <ul style="list-style-type: none"> Timely provision of counterpart funds by the Government EA and IA maintain diligent

<p>Border and customs facilities modernized</p> <p>Road subsector strategy implemented</p>	<p>Index (IRI) value for the north-south corridor reduced to 2.5 by 2017 and kept below 4 IRI for the next 5 years.</p> <p>At least 3 border facilities improved to handle increased traffic flows</p> <p>Road subsector plan set for implementation and resources are made available</p> <p>Increased annual maintenance budget at least by 5% from the actual amount of road maintenance budget in 2008 adjusted for inflation</p> <p>Reduced road accident fatality by 20% by 2017 from 11 accidents per 1,000 vehicles in 2008</p>	<p>tranche performance monitoring system</p> <p>Investment Program and tranche audit reports</p> <p>Data from concerned ministries and agencies</p> <p>National road accident statistics</p>	<p>oversight of works and efficiently administers contracts to deliver program on time and budget</p> <p>Risks</p> <ul style="list-style-type: none"> • Cost overrun due to the sharp escalation of prices of construction materials and labor
<p>Activities with Milestones</p> <ol style="list-style-type: none"> 1. Financing Framework Agreement signed by the Government and ADB by September 2009 2. Periodic Financing Request (PFR) for Tranche 1 Project submitted by the Government and approved by ADB in September 2009 3. Tranche 2 Project prepared by the Government by May 2010 and PFR approved by ADB in July 2010. 4. Subsequent tranche projects prepared by mid 2010 and PFRs approved by ADB within two months of submission during 2011-2014. 5. The Investment Program completed 2016. 			<p>Inputs</p> <ul style="list-style-type: none"> • ADB <ul style="list-style-type: none"> ADF: \$60 million OCR: \$440 million • JICA: \$70 million • Government/Cofinanciers: \$392 million <p>Total: \$962 million</p>

SCHEDULE 3

IMPLEMENTATION FRAMEWORK

Project Executing Agencies

1. The project governing council (PGC) in Armenia, consisting members from ministries of transport and communications, economy, finance, justice, territorial administration, and civil societies will provide overall oversight, decision making and monitoring of the Investment Program. PGC will be co-chaired by the Minister of Economy and Minister of MOTC and its key functions include: (i) guiding the overall policy and strategic direction of the Investment Program; (ii) reviewing and evaluating its performance; and (iii) coordinating among other donor-funded projects. MOTC will be the executing agency (EA) responsible for planning the overall Investment Program implementation and coordination with PGC. MOTC will sign and act as an Employer for contracts with consultants and contractors.

2. Implementation and monitoring of the Investment Program will be delegated to ARD. ARD will set up a Project Management Unit (PMU) to manage the day-to-day coordination, implementation, and administration of the individual projects under the Investment Program, including: (i) selection and assessment of candidate individual tranche projects, (ii) maintenance of project accounts, (iii) support for the procurement of equipment and materials, (iv) monitoring and reporting of individual project implementation, (v) facilitation of environmental and social safeguard measures, (vi) support for the selection of consultants, (vii) oversight of the detailed design and construction supervision. ARD will appoint a program implementation team comprising expertise in highway engineering, tunneling, procurement, project management, financial accounting, and social and environmental safeguards.

Project Accounting Auditing and Reporting

3. ARD will maintain separate project records and accounts adequate to identify the (i) goods and services financed from the loan proceeds, (ii) financing resources received, (iii) project expenses incurred on the components of each project, and (iv) use of counterpart funds. ARD will engage independent external auditors acceptable to ADB to audit project accounts including the imprest account and the statement of expenditure procedures annually. ARD will submit to ADB certified copies of audited annual project accounts with a separate audit opinion on the imprest account and the statement of expenditure procedures as well as the auditor's report in English within 6 months of the end of each fiscal year during implementation. ARD was advised of ADB's requirement for timely submission of audited annual project accounts, and the suspension of disbursements of ADB loans in case of noncompliance with the requirement.

4. ARD will prepare and submit to ADB quarterly progress reports for individual tranches, which will include (i) a narrative description of progress made during the reporting period, (ii) changes in the implementation schedule, (iii) problems or difficulties encountered, and (iv) activities to be undertaken in the next reporting period. ARD will prepare and submit to ADB a project completion report within 3 months of the completion of each tranche, and a program completion report after completion of all tranches under the Program.

Project Review

5. ADB will field an inception mission within 3 months of the tranche approval, and at least two review missions annually. The Government and ADB will jointly undertake a midterm review of Tranche 1 Project in 2011 and a midterm review of the Investment Program in 2013. The timing of midterm reviews of subsequent tranches will be agreed during the appraisal of each

tranche. The midterm reviews will assess whether attainment of program objectives are still likely and review (i) institutional, administrative, organizational, technical, environmental, social, economic, and financial aspects; (ii) whether covenants are still relevant or need to be reconsidered; (iii) whether there is a need to restructure or reformulate the program and/or tranche; and (iv) program's design and monitoring framework where restructuring or reformulation is necessary or its immediate objectives will change.

Governance and Anticorruption

6. ADB's *Anticorruption Policy* (1998, as amended to date) was explained to and discussed with the Government. The Government acknowledges that, consistent with its commitment to good governance, accountability, and transparency, ADB reserves the right to investigate, directly or through its agents, any alleged corrupt, fraudulent, collusive, or coercive practices relating to any project under the MFF. To support these efforts, relevant provisions of ADB's *Anticorruption Policy* are included in the loan regulations and the bidding documents for individual tranches. In particular, all contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of ARD and all contractors, suppliers, consultants, and other service providers financed under the MFF.

7. The Government agreed to take additional measures to improve governance, accountability, and transparency under the MFF. These measures include (i) independent external auditing of contracts, project accounts, and financial statements; (ii) decisions on all procurement-related matters by the PGC; and (iii) timely disclosure of information on selection of consultants and contractors through local newspapers.

Monitoring and Evaluation

8. The performance of the Program and individual tranches will be monitored and evaluated against a set of indicators relating to its impact, outcome, and outputs. These include indicators from the design and monitoring frameworks in Appendix 1. At the start of civil works, the EA/IA will collect values of these indicators as baseline, and will follow the same systematic data collection procedures for reporting biannually during implementation. The EA will report on the performance and impact of the Program at the completion of the Project, and 1 and 3 years after completion. A final report will consist of an evaluation of changes that occurred in the preceding 3 years. If necessary, the EA will engage specialists to make a detailed assessment of socioeconomic, environmental, and technical impacts of the Program.

SCHEDULE 4**SELECTION CRITERIA AND APPROVAL PROCESS FOR PROJECTS**

1. ADB will only finance projects that (i) are part of the Investment Program for Roads Development in Armenia and the Investment Plan adopted by Armenia as described in Schedule 1 to this FFA, (ii) adhere to the implementation arrangements set forth in Schedule 3 to this FFA; (iii) fully comply with the social dimensions and safeguard frameworks set forth in Schedule 5 to this FFA; and (iv) meet the eligibility requirements set forth in this Schedule 4.

A. Selection Criteria

2. To be financed under the Facility, each proposed project or subproject shall:

- (i) construct, upgrade, or rehabilitate roads of high development priority, assessed from their contribution to implementation of the Roads Investment Plan 2009-2020 and to achieving the objectives of the road subsector Roadmap;
- (ii) be in line with the approved feasibility assessment meeting the engineering, financial, economic, environmental, and social requirements of Armenia and ADB;
- (iii) have been allocated counterpart funding sufficient to implement the project or subproject as scheduled and maintain such project/subproject facilities upon completion; and
- (iv) have been granted government approvals and endorsements.

B. Approval Procedures

3. Approval procedures for projects proposed for financing under the Facility will follow the required government review and approval processes as supplemented by the requirements of ARD attached to Schedule 5 to this FFA.

4. For the project proposed for financing under Tranche 1 of this Facility, all necessary government approvals have been obtained as of the date of this FFA.

5. For all projects intended for financing under subsequent tranches of the Facility, the approval procedures will be as follows:

- (i) ARD will review the project proposals to confirm compliance with eligibility criteria and then submit those eligible projects or subproject proposals to MOTC for endorsement.
- (ii) ARD will prepare a PFR in a format agreed with ADB to finance specific projects, and submit it to PGC for review and approval. Upon approval, MOE will submit, through MOTC, the PFR to ADB, together with those eligible project proposals.

- (iii) For projects that are added in the course of updating the Government's Investment Program for Roads Development in Armenia, all statutory clearances should be sought prior to the submission of the PFRs to ADB.
- (iv) MOTC, MOE, ARD and ADB will maintain contact through periodic ADB review missions and quarterly progress reports, and in so doing may effect advanced consultation on PFRs prior to submission to ADB.
- (v) Subject to satisfactory compliance with the selection criteria and approval procedures, and in compliance with ADB's relevant policies, ADB will approve the proposals of the projects.
- (vi) Upon receipt of ADB approval, ARD will proceed with tendering in accordance with ADB's Procurement Guidelines.

6. Tentative components for tranche 2 project may include (i) upgrading the 88-km Ashtarak–Gyumri road to four-lane standard; (ii) feasibility analysis and preparation of other tranche projects; (iii) improving border infrastructure and procedures, and (iv) further implementation of road subsector plan. Subsequent tranches may include upgrading and/or rehabilitating the remaining parts of the north-south road corridor and will provide further support road corridor management.

SCHEDULE 5**SOCIAL DIMENSIONS AND SAFEGUARD REQUIREMENTS**

1. Armenia will ensure that all the requirements prescribed in this Schedule and the following safeguard frameworks and plans that have been prepared with respect to the Facility and the first tranche, and of which ADB has been provided full copies, and which are deemed incorporated herein by reference, are complied with during the processing and implementation of the projects financed under the Facility:

- (i) environmental assessment and review framework dated 29 July 2009 (EARF),
- (ii) land acquisitions and resettlement framework dated 29 July 2009 (LARF), and
- (iii) environmental management plan dated 29 July 2009 for the first tranche.

2. The frameworks cover the Facility-specific information and requirements in accordance with ADB's safeguard policies: (i) the general anticipated impacts of the components or projects likely to be financed under the MFF on the environment, involuntary resettlement, and indigenous peoples; (ii) the safeguard criteria that are to be used in selecting components, projects; (iii) the requirements and procedure that will be followed for screening and categorization, impact assessments, development of management plans, public consultation and information disclosure (including the 120-day disclosure rule, if required), and monitoring and reporting; and (iv) the institutional arrangements (including budget and capacity requirements) and the client's and ADB's responsibilities and authorities for the preparation, review and clearance of safeguard documents.

3. Prior to the preparation of each PFR, the applicability and relevance of each Safeguard framework for environmental assessment, involuntary resettlement, and indigenous people will be reviewed and updated to ensure relevance and consistency with applicable country legal frameworks and ADB's (i) Involuntary Resettlement Policy (1995), (ii) Indigenous People Policy (1998), and (iii) Environment Policy (2002) (collectively referred to as the "Safeguard Policies"), as amended from time to time.

4. In all cases, for each new PFR preparation, ARD will review ongoing projects under the Facility to check on the status of compliance with the safeguards plans and frameworks, and submit the review reports to ADB, together with other required safeguard documents relevant to the projects included in the tranche being processed. In any case if major noncompliance is discovered in the course of the review of ongoing subprojects, a corrective action plan will be prepared and submitted to ADB.

5. In addition, all ADB Safeguards Policies in effect as of the date the financing of a project is prepared or provided under the Facility will apply to such project. In the event there is a discrepancy between the laws and regulations of Armenia and ADB's Safeguards Policies, then ADB's Safeguards Policies shall prevail.

Environment

6. ARD shall ensure that each project and all facilities financed under the Facility are developed, conducted, implemented and maintained in accordance with all applicable laws and regulations of Armenia and ADB's Environment Policy (2002) and Environmental Guidelines (2003).

7. ARD shall ensure that a relevant environmental impact assessment (EIA) or initial environmental examination (IEE) (as applicable) is prepared for each project financed under the Facility in accordance with all applicable laws of Armenia and ADB's Environment Policy, and that all EIA/IEEs are approved by ADB and Armenia's Ministry of Territorial Administration and are adhered to during design, construction and operation phases of such projects.

8. ARD shall ensure that the environmental management plan (EMP) is implemented. All recommendations of the EMP are incorporated in the bidding documents, civil works contracts and consultant's contracts to ensure compliance.

9. ARD shall: (i) monitor the implementation of EMPs by the contractor; (ii) ensure that civil works and consulting services contracts include specific provisions for EMPs' preparation, implementation and monitoring, (iii) ensure that mitigation measures in EMPs are adequately implemented by the contractors, and (iv) provide adequate budgetary allocation for this activity. ARD shall also ensure timely submission of semi-annual monitoring reports on EMPs implementation to ADB on a project for three years after completion of construction.

10. No civil works contract shall be awarded until the corresponding initial environmental examination or environmental impact assessment as may be applicable to project financed under the Facility has been approved by ADB.

Land Acquisition and Resettlement

11. ARD shall ensure that all land and rights-of-way required by the projects are made available free and clear from any and all rights and claims of third parties and any other encumbrances whatsoever in a timely manner and that the provisions of the Land Acquisition and Resettlement Plans (LARPs) are implemented in conformity with (i) all applicable laws and regulations of Armenia, (ii) ADB's Involuntary Resettlement Policy (1995), and the agreed Land Acquisitions and Resettlement Framework (LARF).

- (i) LARF shall be reviewed, if necessary updated, and submitted for ADB approval at least annually and at the beginning of the preparation of each tranche under the Facility. An LARP consistent with the reviewed and updated LARF shall be prepared for each project proposed for financing under the Facility.
- (ii) Preparation of LARF for the Facility and preparation of an LARP for Tranche 1 Project consistent with the LARF shall be a condition for such Facility and tranche appraisal.
- (iii) The review and update of LARF and preparation of an LARP for each subsequent project consistent with the LARF shall be a condition for such project appraisal.
- (iv) Preparation of an updated LARP for each project based on the final design and consistent with the LARF shall be a condition for approval of the award of relevant civil works contract(s).
- (v) Completion of the implementation of the full LARP shall be a condition for the commencement of civil works. ARD shall incorporate this condition in the civil works contract(s).

12. Pursuant to ADB's Involuntary Resettlement Policy (1995) the following shall be required:

- (i) compensation shall be provided at replacement cost together with any entitlements as stipulated in the approved LARF and LARP;
- (ii) lack of formal title will not be a bar to resettlement assistance or rehabilitation for land or any other loss;
- (iii) counterpart funds and disbursements shall be timely provided to affected persons, with agreed compensation and rehabilitation provided to them prior to any land, house or other affected asset being taken;
- (iv) Armenia shall meet any unforeseen obligations in excess of budget estimates;
- (v) consultations and grievances related to the investment project's resettlement activities shall be documented;
- (vi) LARPs shall be updated if an investment project is modified such that there are different or additional resettlement impacts; and resettlement activities shall be reported to ADB as part of the quarterly progress reports by ARD.

13. ARD, shall ensure that within 3 months of the effective date of the loan agreement under relevant tranche, the PMU engages an independent agency, acceptable to ADB, to conduct independent external monitoring and evaluation of the resettlement process and impacts. Reports of the independent monitoring agency will be submitted to ADB on a quarterly basis.

14. No civil works contract shall be awarded until a LARP as may be applicable to the project financed under the Facility has been approved by ADB.

15. Contractors may only commence civil works after the LARP has been implemented in accordance with its terms.

16. ARD shall ensure an independent monitoring of the social impacts throughout implementation of the Facility, in consultation with local governments, local communities, and nongovernment organizations. In this respect, ARD shall ensure that all civil works will comply with applicable national and international labor, health and safety laws and standards including; (i) employ women, handicapped, and minorities, if any, without discrimination; (ii) prohibit use of child labor and illegal immigrants, and differentiation in wages among male, female and other social groups for work of equal value; (iii) disseminate information and raise awareness of health risks at project sites, such as proper construction safety standards, prevention of communicable diseases and sexual harassment, (iv) provide healthy, safe, and secure working conditions as well as adequate medical care; and (v) observe local protocols on acceptable social and professional behavior towards the local population and employees. Contracts for all projects/subprojects to be financed under the Facility must include specific clauses on these undertakings, and compliance will be strictly monitored during North–South Road Corridor Investment Program implementation. ARD shall ensure that compliance with these provisions is monitored by the PMU.

SCHEDULE 6

UNDERTAKINGS

In addition to such undertakings as ADB will reasonably require in legal agreements for individual tranches under the Facility, Armenia undertakes that it will ensure that:

- (i) **Road subsector plan:** MOTC will finalize the Road Subsector Plan (2010-2020) prepared under the ADB-financed TA Transport Sector Strategy, obtain endorsement of various government and external stakeholders and submit for approval by the Government by mid-2011.
- (ii) **Counterpart funding and resources:** (i) financial, technical and human resources shown in the Investment Program and Tranche 1 financing plans, and the implementation arrangements will be provided on a timely basis; (ii) adequate funds to sustainably maintain the road corridor throughout its service life will be allocated; (iii) financial, human and technical resources to implement the road subsector plan will be made available; and (iv) it will use its best efforts to obtain additional external financing as may be necessary for the reconstruction and rehabilitation of the North–South Road Corridor in accordance with the agreed Investment Plan.
- (iii) **Transport policy and sector management:** (i) policies under the PCA with the EU governing the road subsector development and operations are harmonized in a way that road subsector roadmap and investment plan under the Investment Program are implemented coherently; (ii) best efforts are used to facilitate cross-border transit of road transport consistent with the European Agreement on Main International Traffic Arteries of 15 November 1975, and (iii) developing the human resources, technical, managerial and administrative capacity in the road subsector to achieve greater efficiency in planning, developing and operating the infrastructure financed under the Investment Program is of high priority.
- (iv) **Anticorruption; transparency and good governance:** MOTC and ARD will follow ADB's *Anticorruption Policy* (1998, as amended to date) and acknowledge that ADB, consistent with its commitment to good governance, accountability and transparency, reserves the right to undertake directly, or through its agents, investigation of any alleged corrupt, fraudulent, collusive or coercive practices related to the project and cooperate with such investigation and extend all necessary assistance including access to all relevant books and records, and engaging independent experts who may be needed for satisfactory completion of such investigations. All contracts financed by ADB under the Investment Program include provisions specifying the right of ADB to audit and examine the records and accounts of the implementing agency and all contractors, suppliers, consultants, and other service providers as they relate to the MFF. Additional measures to improve governance, accountability, and transparency under the MFF, include (i) independent external auditing of contracts, project accounts, and financial statements; (ii) decisions on all procurement-related matters by the PGC; and (iii) timely disclosure of information on selection of consultants and contractors through local newspapers.

- (v) **Construction quality:** (i) road corridor under the Investment Program is improved to comply with the international standards, particularly international agreements to which Armenia is a contracting party; (ii) sound contract management and quality control procedures are performed in accordance with internationally acceptable standards; and (iii) completed works comply with the design drawings, construction specifications and other documents stipulated in the bidding documents.
- (vi) **Environment:** (i) projects under the Investment Program are designed, carried out, maintained, and monitored in compliance with (a) all applicable environmental laws and regulations of Armenia; (b) ADB's *Environment Policy* (2002), or, if applicable, the *Safeguard Policy Statement* (2009); (c) environmental assessments (IEEs/EIAs) prepared for each individual project; (d) EMPs, including the mitigation measures and monitoring requirements arising from the implementation of the IEEs/EIAs; and (e) a strategic assessment of potential interactions between the Investment Program and the environment; (ii) civil works contractors' specifications include requirements to comply with the environmental mitigation measures contained in the IEEs/EIAs and EMPs, and (iii) civil works contractors are supervised to ensure compliance with the requirements of the IEEs/EIAs and EMPs.
- (vii) **Land acquisition and resettlement:** (i) in the event that any land acquisition or resettlement becomes necessary, appropriate land acquisition and resettlement plans (LARPs) will be prepared in accordance with the national laws and regulations, the resettlement framework and the ADB's *Policy on Involuntary Resettlement* (1995), or, if applicable, the *Safeguard Policy Statement* (2009) in consultation with the affected people; (ii) endorse and disclose all LARPs to the public and submit them to ADB for approval; (iii) all land and right-of-way required for the project implementation are made available in a timely manner, (iv) land acquisition and resettlement are carried out promptly and efficiently following the LARPs agreed with ADB and monitored, evaluated, and reported to ADB as required in the LARPs; and (v) any civil works will be commenced only after the required land has been acquired and affected households have been compensated at full replacement cost.
- (viii) **Local consultation and gender:** (i) all local consultations to address safety, social, and cultural issues during implementation of the Investment Program are carried out as recommended in the summary poverty reduction and social strategy; (ii) men and women are given equal employment opportunities directly, or indirectly, arising from the Investment Program and without any differentiation of wages for equal work; (iii) mechanisms for maximizing local employment benefits will be included in the bidding documents.
- (ix) **Employment and Labor:** All civil works contracts under the Investment Program will (i) comply with applicable labor laws of Armenia, and (ii) use best efforts to employ women and local people, including disadvantaged people living in the vicinity of the project area. Each civil works contract will contain provisions (i) prohibiting use of child labor and differentiation in wages between men and women for work of equal value or type, (ii) requiring dissemination of information on the risks of sexually transmitted diseases to those employed at the construction sites, and (iii) requiring health, sanitation and appropriate working

conditions at the construction sites. Compliance with these assurances will be recorded in the project performance monitoring system and monitored during implementation.

- (x) **Health risks and prevention:** all civil works contracts will include a requirement to conduct an information and education campaign on sexually transmitted diseases and HIV/AIDS for construction workers as part of the health and safety program at campsites during the construction period.
- (xi) **Illegal trafficking:** relevant authorities will undertake concrete and adequate measures to detect and prevent trafficking of humans, wildlife, endangered species, and illegal substances through the road corridor.
- (xii) **Change in ownership and operation:** it will seek ADB's consent at least 6 months prior to: (i) changing ownership of the road, road facility, or structure financed under the Program; (ii) selling, transferring, or assigning the interest or control over the road, road facility, or structure financed under the Investment Program; (iii) leasing or other contract or modification of the functions and authority of the ARD over operation and maintenance of any road, road facility, or structure financed under the Investment Program; and (iv) such changes will be carried out in a legal and transparent manner.
- (xiii) **Compliance with international agreements:** the project facilities financed under the Investment Program are built, equipped, operated, maintained and managed in compliance with all international agreements and conventions to which Armenia is a party.