Eurasian Development Bank
Resources Manager of EurAsEC Anti-Crisis Fund

APPRAISAL

of Application
of Republic of Armenia
for Investment Loan
to be provided by the EurAsEC Anti-Crisis Fund for the project
"Construction of North-South Road Corridor (Phase 4)"
in the amount of US$ 150 million

June 2014
Republic of Armenia
Fiscal year: 1 January – 31 December

National Currency Exchange Rate
as of 01/05/2014

<table>
<thead>
<tr>
<th>Currency</th>
<th>Exchange Rate</th>
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</thead>
<tbody>
<tr>
<td>1 RUR</td>
<td>11.573</td>
</tr>
<tr>
<td>1 KZT</td>
<td>2.2713</td>
</tr>
<tr>
<td>1 US$</td>
<td>413.4998</td>
</tr>
<tr>
<td>1 EUR</td>
<td>570.8783</td>
</tr>
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</table>

Acronyms and Abbreviations

ADB: Asian Development Bank
ACF, Fund: Anti-Crisis Fund of the Eurasian Economic Community
WB: The World Bank Group
GDP: Gross Domestic Product
GNI: Gross National Income per capita
EDB, Resources Manager: Eurasian Development Bank
EurAsEC: Eurasian Economic Community
IDB: International Development Banks
IBRD: International Bank for Reconstruction and Development
IFI: International Financial Institutions
EIA: Environmental Impact Assessment
RA: Republic of Armenia
CIS: Commonwealth of Independent States
FS, FR: Feasibility Study, Feasibility Report

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TABLE OF CONTENTS

1. BASELINE PARAMETERS OF LOAN RECOMMENDED BY RESOURCES MANAGER .................. 4
2. MANAGER’S APPRAISAL OF APPLICATION .................................................................. 6
3. RATIONALE OF APPRAISAL ....................................................................................... 9
   3.1. Social and Economic Condition of Armenia ......................................................... 9
       3.1.1. General Description ........................................................................................ 9
       3.1.2. Macroeconomic Performance ..................................................................... 10
       3.1.3. Structural Constraints to Sustainable Growth ............................................. 12
   3.2. Condition of Transport Sector .............................................................................. 13
   3.3. Overview of Transport Corridor .......................................................................... 18
   3.4. Project Description .............................................................................................. 21
       3.4.1. Objectives ..................................................................................................... 21
       3.4.2. Current Status ............................................................................................... 22
       3.4.3. Technical Parameters .................................................................................. 24
   3.5. Project Funding Requirements ............................................................................. 26
   3.6. Economic Benefits ................................................................................................ 27
   3.7. Social, Economic and Anti-Crisis Benefits ......................................................... 29
   3.8. Compliance with ACF Mission ............................................................................. 30
   3.9. Funding Scheme .................................................................................................. 30
   3.10. Government Support .......................................................................................... 31
   3.11. Environmental Impact Assessment ................................................................... 32
   3.12. Social Impact Assessment .................................................................................. 33
   3.13. Risk Assessment .................................................................................................. 34

Appendix 1. Matrix of Project Compliance with ACF Mission .............................................. 36
Appendix 2. Investment Loan Application of the Ministry of Finance of the Republic of Armenia ................................................................. 37
Appendix 3. Key Macroeconomic Performance Indicators of Armenia ................................ 40
## 1. BASELINE PARAMETERS OF LOAN RECOMMENDED BY RESOURCES MANAGER

<table>
<thead>
<tr>
<th>Project</th>
<th>Construction of the North-South road corridor as part of Phase IV of the Program &quot;Development of North-South transport corridor (20.5 km from Agarak towards Kajaran)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beneficiary</td>
<td>Republic of Armenia</td>
</tr>
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</table>
| **Amount and conditions of funding** | **Requested amount** of ACF Loan: US$ 150 million  
Total amount of funding under Phase IV of the Program "Development of North-South Transport Corridor" is equal to: US$ 468.1 million  
Interest rate: **1.65% per annum**  
Interest margin: **n/a**  
Risk premium: **n/a**  
Front-end fee: **0.5%**  
Commitment fee: **n/a**  
Loan maturity, including grace period: **up to 20 years**  
Grace period for principal repayment: **up to 5 years**  
Date of termination of Loan availability: **31 December 2018**  
Grant-element level: **31.75%** (consistent with ADB's lending terms)  
Co-financing by Beneficiary: **at least US$ 30 million** (20% of the Project cost) |
| **Type of transaction** | Investment loan, co-financing jointly with ADB |
| **Sector** | Transportation: Transport infrastructure |
| **Key performance indicators** | Increase in road network throughput capacity and traffic safety in Armenia.  
Smooth traffic of trucks and cars.  
Improved access to markets and reduced logistical overheads.  
Increased transit traffic across the territory of RA, including toward destinations in EurAsEC countries.  
Supportive transport facilities offered to residents of local communities. |
| **Main objective** | Construction of a motor road to enable enlargement of transit capacity of RA, as well as provision of trucking service for transportation of export goods with adequate road safety systems in place. |
| **Procedure for disbursement of Fund resources** | The ACF Loan proceeds are disbursed to the Beneficiary as the Beneficiary signs contracts in the process of Project implementation in accordance with the schedule of payments as provided by the said contracts |
| **Loan repayment schedule** | On the 30th day of the last month of each calendar semester beginning from 30 July 2020 and up to 30 December 2034, inclusive. The amount of each semiannual payment: five million US dollars (5,000,000.00). |
| Schedule of interest payments | Semiannually, on the 30th day of the last month of each calendar semester, beginning from the semester when the first disbursement of the Investment Loan took place, and up to the date of final payment of the Principal of the Investment Loan. |
| Purpose of Loan | Payment of reasonable prices under contracts signed by the Beneficiary and funded by the Investment Loan in the course of the Project implementation. |
| Project company | Participation of a project company (Ultimate Beneficiary) is not envisaged. Rights and obligations of such project company (Ultimate Beneficiary), as specified in the relevant ACF documents, are assigned to the Beneficiary. The provisions of the ACF’s relevant regulatory documents on investment lending by ACF member states to a project company (Ultimate Beneficiary) do not apply. |
| Principal risks and mitigation techniques | The Project contains design-specific risks, construction risks, operating risks, supplier risks, social risks, environmental risks, as well as legal and fiduciary risks (see Risk Matrix). The Manager recommends reducing such risks in the course of implementation to rely on the ADB’S policies on compliance review and safety, on environmental safeguards, resettlement and compensations, disclosure of information, as well as anti-corruption policies in accordance with the Framework Cofinancing Agreement between ADB and EDB. In procurement operations the Manager recommends to take advantage of the procurement policies of ACF and the World Bank. Also, in order to reduce reputation, corruption and construction risks, the Manager believes the Government of RA should invite an on-site consultant for supervision over construction activities, whose services would be paid by the Investment Loan. To reduce the risks of adverse environmental impact the Manager recommends making provision for preparation of an EIA report, EI Management Plan and Budget, stating environmental impact assessment of the Project and public hearings as a precondition for financing the construction contract. To reduce the risks associated with land acquisition and resettlement activities, the Manager deems it necessary to incorporate into the agreement a comprehensive land acquisition and resettlement plan as a precondition for financing the construction contract. |
2. MANAGER'S APPRAISAL OF APPLICATION

This Appraisal Report deals with the application of the Republic of Armenia (hereinafter the "Applicant") for an ACF investment loan (hereinafter the "Loan") in the amount of US$ 150 million, which arrived at the Bank on 23/05/2014 in an attachment to the letter # 12/5-29-188 (hereinafter the "Application"). The principal declared objective pursued in applying for this Loan is to provide co-financing support to Phase IV of the Program “Development of North-South Road Corridor” (on the basis of co-financing together with the Asian Development Bank in accordance with the Framework Cofinancing Agreement, signed on 03 May 2013 in Delhi and endorsed by the Fund Council on 10 July 2013) (hereinafter the "Project"). On 26 June 2013 the ACF Council endorsed the Project concept and the Manager’s Appraisal of the preliminary application (the preliminary application was received on 19 December 2012).

Section 3 of this document contains rationale for the ACF Resources Manager's Appraisal of the Application (hereinafter - the "Manager").

Having examined the Application, the Manager requests the ACF Council to consider the following recommendations and conclusions:

The Application is executed in full compliance with the requirements of the Fund. The depth of elaboration of the Application in terms of availability of data required for the approval of the Project funding is deemed satisfactory.

The Application conforms to the Mission of the Fund, its funding objectives, lending policy and conditionality, as defined by the “Treaty on the Establishment of the Fund, Statute of the Fund,” the “Regulation on ACF Investment Loans” and relevant decisions of the ACF Council.

The Project is consistent with the ACF mission. The implementation of the Project will improve economic sustainability of the Republic of Armenia. Preservation and development of the transport infrastructure in the context of extremely limited budget resources allocated for its maintenance, and isolation of the country from the West-East corridor, constitutes an indispensable prerequisite for ensuring sustainable economic growth in the country, improved standards of living of the population, more opportunities for participation of RA in integration processes, including with the ACF member states.

The Republic of Armenia has met all the requirements as defined by the “Treaty on the Establishment of the Fund”, the “Statute of the Fund” and relevant decisions of the ACF Council. The requirements to make an initial contribution in cash and in the form of bills of exchange have been met in full, and there are no BOE-related outstanding liabilities. According to the information available to the Manager, the Republic of Armenia has no outstanding debts either to other Fund member states, or to any major international financial institutions. The Manager is in receipt of the relevant letters to certify the above from the International Monetary Fund and the World Bank. Up till now the Republic of Armenia has never been granted ACF loans, and the requested amount is within the RA eligibility limit for ACF resources. The level of debt sustainability of the Republic of Armenia enables us to make a positive conclusion about financial solvency of the Beneficiary.

In accordance with para 12 and Appendix 1 of the Regulation on the Use of ACF Resources for Providing Investment Loans, the Manager recommends to define financial conditionality for the Investment Loan, given the requirement of the IMF Program on the size of the grant-element of at least 30%, as well as the need for concordance of the above conditionality with the financing terms tendered by the other Project participants (ADB).

Since the Project structure makes no provision for a Project Company (Ultimate Beneficiary), and the implementation process will be managed directly by the Beneficiary which is
the Ministry of Transport and Communications of RA (MTC), the Manager recommends to vest in the Beneficiary the rights and obligations of the Ultimate Beneficiary as defined by the “Regulation on ACF Investment Loans” and other ACF documents.

To ensure due quality of the design documentation, construction activities and proper use of the Loan proceeds, the Manager will work closely with the Asian Development Bank, which has provided technical assistance to the Government of RA in preparation of the Feasibility Report on Phase IV of the Program "Development of North-South Road Corridor", including for the road section to be funded by ACF.

As defined by the “Agreement on Management of Fund Resources”, the Manager is required to supervise and control procurement of goods, services and work funded by ACF loans in accordance with its in-house procurement policies and regulations, and ensure compliance therewith by making relevant provisions in ACF lending agreements with beneficiaries. The ACF Council approved the Procurement Policy of ACF in June 2013. The Policy makes provision for potential reliance on procurement procedures of other IDBs for ACF-funded projects. To ensure competitiveness and transparency of the proposed policies, the Manager recommends to consider application of the World Bank rules in the course of implementation of the Project under appropriate supervision by the World Bank procurement experts and with preferences extended to suppliers from ACF member countries. For such WB technical consulting assistance the Manager will need up to US$ 250,000 to be sourced from the ACF Loan proceeds.

All procurement operations funded by the Investment Loan must be carried out by the Beneficiary in accordance with the ACF Procurement Policy and the IBRD Procurement Guidelines, insofar as they are not inconsistent with the ACF Procurement Policy, and on the basis of the IBRD standard bidding documents. One applicable procurement method in respect of construction work with preparation of a project detail design requires organizing International Competitive Bidding for a contract to be awarded to a technical consultant for services in engineering and supervision of construction works under the Project - quality- and cost-based selection (QCBS) - no matter how many contracts will be signed (one or several inter-related contracts), and regardless of the contract price of each of them

Monitoring and evaluation of the Project will be performed by the Manager in accordance with the EDB monitoring procedures. The above monitoring procedures will require continuous collection of data on implementation progress, analysis of the Beneficiary's reporting, including its Project financial audit statements, risk assessment by the Manager on an on-going basis, regular field missions of the Manager's staff to visit the Project sites.

Disbursement of the Investment Loan will be carried out in accordance with the World Bank's relevant procedures, which require such disbursement to take place upon receipt from the Manager of all the necessary approvals as provided in the relevant procurement procedure, and after submission to the Manager of all supporting documents to certify the purpose of the payment (contracts, invoices and other documents). Transfer of funds will be performed by the Manager on the basis of the Beneficiary’s disbursement requests directly to the vendors contracted in compliance with the IBRD procurement procedures.

The environmental and social policy of the Manager allows additional requirements to be imposed by the Council on ACF-funded projects, including compliance with safeguards policies of other IFIs. In particular, as required by the Framework Cofinancing Agreement between the Asian Development Bank and the Eurasian Development Bank, endorsed by the ACF Council, the Manager in its Project implementation activities will rely on the safeguards policies of the Asian Development Bank. The preliminary review of the Project has shown that its implementation may
generate social consequences. The ADB has sufficient experience and expertise in mitigating such impacts.

In order to reduce reputation, corruption and construction risks, the Manager believes the Government of RA should contract a consultant for supervision of construction activities, whose services should be paid from the Investment Loan.
3. RATIONALE OF APPRAISAL

3.1. SOCIAL AND ECONOMIC CONDITION OF ARMENIA

3.1.1. General Description

Republic of Armenia is a middle-income country: according to some estimates, in 2012 per capita GDP at par value was equal to US$ 7,418\(^1\). The poverty level stays relatively high: in 2013 it was 32%. Yet there is no noticeable improvement compared with the pre-crisis period: in 2008 the poverty rate was 27.6%. Unemployment is running high; according to the International Labor Organization the unemployment rate in 2013 was 18.64%\(^2\).

Limited available natural resources and small size of the economy result in high dependence on foreign trade. Exports account for 27% and imports - for more than 50% of GDP. The principal trade partners are Russia, EU, as well as Iran, China and the United States. Russia is the key market for Armenian farming and manufacturing products. The proposed accession of Armenia to the Customs Union (CU) will further reinforce its integration with Russia, and the potential increase in foreign direct investment will open up new opportunities for cooperation with other Customs Union countries. Europe, on the other hand, is the key consumer of Armenian exports of non-ferrous metals and minerals.

Dependence on externalities is largely due to incomes of migrants working abroad, who transfer their earnings to Armenia, which amount in total to about 20% of the Armenian GDP.

The most important sectors in Armenia are agriculture, retail trade, construction business and manufacturing. In 2012 these sectors shared in the national economy, respectively, as follows: 19.2%, 13.1%, 10.3%, 10.1%\(^3\). Beginning from 2008 construction businesses has demonstrated a pattern of progressive shrinking of its input in the national GDP (in 2008 its share reached its maximum at 25.3%), whereas other sectors, including export-oriented industries, showed more active development trends.

Its landlocked status and rugged mountainous terrain throughout most of Armenia hampers the development of trade relations. One more factor complicating the development of trade, is the economic blockade imposed by the two neighboring countries (Azerbaijan and Turkey).

Armenia's vulnerability to external and internal shocks is still significant. Inflation and growth rates are volatile, the current account deficit and dollarization of the economy are at a precariously high level, whereas the dramatic increase in the public external debt during the ongoing global crisis, has enhanced the need for continued reform in the area of fiscal consolidation.

The country has made some progress in forming a positive business climate and ranks 37th in the World Bank "Doing Business" rating, but it still faces certain issues in respect of the absence of conditions for developing competitive environment, the relatively inadequate financial intermediary institutions, insufficient human development funding, as well as poor infrastructure.

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\(^1\)Source: World Bank; the rate is calculated in terms of purchasing power parity.
\(^2\)Global Unemployment Trends, 2014. According to national statistics the unemployment rate was 16.2%.
\(^3\)National Statistical Service of RA
### 3.1.2. Macroeconomic Performance

The development pattern of Armenia in the 1990s was regarded as extremely unsteady, which was due to the problems of transition, as well those generated by the military conflict in Nagorny Karabakh. Growth of the real GDP varied within minus 42% in 1992 to 7.3% in 1998 amid high and volatile prices.

In the 2000s, before the global crisis set in, the growth rate was very high, i.e. average annual 12.6% in 2001-2007. In 2000-2008 it was relatively high, and up until 2002 was supported by high labor productivity performance, good external demand\(^4\) and a flexible exchange rate policy\(^5\), which contributed to the growth of exports. Since 2003, along with the improvement in the external market conditions and accelerated growth in Russia, the GDP growth to a large extent was driven by significant amounts of FDI and cash remittances of migrant Armenians channeled to non-exchange traded sectors, such as construction, domestic services and retail. As a result, the share of construction in the GDP structure increased from 16% in 2003 to 25.3% in 2008\(^6\), and the average annual rate of retail trade growth in the above period was equal to 10.3%. The improvements in the construction sector had a positive impact on employment and consumption\(^7\).

The average inflation for the period 2001-2007 was at a relatively low level of 3.9% (year-end), which was due both to favorable import prices, and prudent monetary policies pursued by the Central Bank of Armenia (CBA). Beginning from 2006 the CBA has been targeting inflation, and that has also contributed to keeping it within moderate limits. However, the accelerated development of domestic market sectors and appreciation of the AMD real exchange rate, have led to diminished exports and increased foreign trade deficit, which in 2008 exceeded 25% of GDP. Yet, the significant inflows of cash remittances and FDI enabled not only financing the current

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\(^4\) The key exports in Armenia are non-ferrous metals, which during that period were growing in price, some of them by a factor of 2-5.

\(^5\) At the time the real exchange rate of the dram dropped by 15%.

\(^6\) Investments grew in the structure of GDP from 25% to 40%.

\(^7\) Growth in the construction industry most beneficially reflected on the employment and consumption amongst the poorest 40% of the population. According to the World Bank, incomes of this group in 2006-2008 rose by 6.5% against 5.2% on aggregate for population nationwide.
account deficit, but also building up international reserves, which in 2005-2007 grew on average by 5\% of GDP.

The global financial crisis, which caused a decline in external financing inflows, including current transfers by 35\%, led to a collapse of the construction industry and a 14.1\% drop in the GDP in 2009. The reduction of the GDP was accompanied by a rise in unemployment and increase in poverty levels. The anti-crisis measures enacted by the Government somewhat mitigated the fall in incomes of the population, but increased the budget deficit to 7.9\% of GDP against 1.2\% in the previous year. The resultant stagnation of domestic production of export goods, the dramatic reduction in cash remittances and FDI inflows led to an abrupt increase in the current account deficit from 6.4\% of GDP in 2007 to 15.8\% in 2009. The rate of inflation accelerated somewhat and reached 6.7\% compared with 5.3\% in the preceding year.

The economic growth in 2010-2012 averaging 4.7\% annually (and 7.2\% in 2012) was largely spurred by the post-crisis recovery of domestic demand amid a steady growth of incoming cash remittances, as well as positive results of the anti-crisis measures of the Government. As for the production industries, their principal growth drivers were industrial and agricultural output despite the on-going slowdown in construction performance indicators. High prices for metals and minerals boosted the development of manufacturing industries (11\% average annual) and increased exports (7\%). Favorable weather conditions enabled growth in the farming sector by an average 11.5\% annually.

In 2013 the economic growth slowed down to 3.5\% against 7.2\% in 2012. Almost all sectors of the economy showed the above slowdown. Given the negative real wage growth and stalled lending, domestic demand is stimulated only by migrant cash remittances. The investment activities are not yet back on track due to the on-going remodeling of the development strategy of Armenia, lingering in the aftermath of the 2008-2009 crisis, underutilization of public expenditure capacity and diminished foreign direct investments.

The slowdown in domestic demand growth had its impact on the pattern of imports, which, given the export recovery and increased inflows of migrant cash remittances, positively reflected on the current account balance. For the first time since 2007 the current account deficit was down to a single digit value, reaching 8.4\% of GDP (vs. 11.2\% in 2012).

According to the Ministry of Finance of Armenia, in 2013 the national budget deficit was equal to 0.4\% of GDP (compared to 1.5\% in the preceding year). The above fiscal positions improved on the back of a tangible growth of income, primarily of tax revenues (by 1.5 percentage points), and keeping expenditures at the 2013 level, mainly due to the above mentioned underutilization of public investment resources. The year-end external public debt remained at the level of the previous year, i.e. 37\% of GDP.

Budget consolidation efforts, as well as the reduction of the absolute amount of debt in real terms, enable positive rating of debt sustainability in Armenia. According to the IMF estimates, given the budget deficit below 2\% of GDP, the external debt-GDP linkage curve will turn steadily downwards\(^8\). In turn, the proposed budget expenditure consolidation substantially limits the capacity of the Government of Armenia to increase public investments due to the need to finance welfare.

The external public debt of the Republic of Armenia (including debt of the Central Bank), as of the beginning of 2013, amounted to US$ 4 billion, which accounts for 38\% of GDP. Given the above, in 2013 the trend towards growth of the external public debt-to-GDP ratio died down. The

slowdown in economic growth was largely due to fiscal consolidation efforts, which helped to reduce the budget deficit from 5% of GDP average annual in 2009-2011, down to less than 1.6% on average in 2012-2013.

In 2013 the external debt service burden rose somewhat (around 3% of GDP or 8% of export earnings and migrant cash remittances). In 2013 the Republic of Armenia floated on a stock exchange about US$ 700 million worth of securities (6.7% of GDP), which allowed to iron out the external debt structure issues. It is estimated that for the next few years the level of external debt service liabilities will not exceed 10% of export earnings and current migrant cash remittances.

The impact of the Loan on debt sustainability of Armenia is estimated as negligible. Taking a loan in the amount of US$ 150 million will enlarge the external public debt liability by 0.4% and will not significantly affect debt sustainability characteristics. Given the debt repayment schedule and loan conditionality, it will not constitute a substantial additional burden for the budget.

### 3.1.3. Structural Constraints to Sustainable Growth

The economic growth model has turned out to be highly vulnerable to crisis impacts. In 2003-2008 the construction and service sectors were responsible for over 90% of the GDP growth. The global crisis, which set off the reduction of capital inflows, cash remittances and external demand, resulted in the economic slump and exposed imbalances in the structure of GDP and inefficient investment projects. As the result, the decline in GDP of Armenia by 14.1% in 2009 reflected its deepest downfall among all countries in the region. It took almost 4 years for the Armenian GDP to recover to its pre-crisis level. The inefficient model of development contributed to building up of toxic real estate assets, which severely restrict the availability of investment opportunities in the country. Furthermore, the current status of the construction sector will have a negative impact on the overall economic growth.

Public investments in infrastructure projects are inadequate. In 2012 they accounted for 3.8% of GDP. The proposed increase of budget expenditures to promote development of fixed assets, such as infrastructure projects, requires further reforms in public finance management, including improving tax collection capacity.

Despite the fact that the national banking system is, in general, operational and rapidly growing, it is still inferior to most banking networks in European and Central Asian countries in size, efficiency, and innovative product lines. The amounts of loans granted to private businesses constitute about 38% of GDP compared to the median in the ECA countries, which is equal to 42%.

The existing limitations imposed on establishing and development of small and medium-sized businesses are responsible for the high level of unemployment in the country. According to the World Bank, the employment rate in Armenia is much lower than in most European countries: 53% compared to the average for Europe, which is 60%. Despite the recovery in the GDP growth rate, unemployment is still high (18%) and exceeds the regional average.

One more important structural constraint resides in the geographical location and geopolitical status of Armenia. Although the logistical system of Armenia significantly improved in recent years, having moved from the 131th in 2007 to the 100th position in 2012, goods transportation problems are still outstanding. Armenia is a land-locked country, and moreover, has limited ground transportation capacity. Since Armenia has no trading relations with either Turkey or Azerbaijan, exports can only be trucked via a transit corridor in the North across Georgia and in the South through Iran. However, it is difficult to use even these transit routes, because they run across rugged mountainous terrain, and also because these roads are inaccessible in wintertime.
One more limitation consists in inadequate infrastructure, which increases travel time and overheads. According to the Global Competitiveness Report for 2013-2014 in the category of infrastructure quality Armenia ranks 80th out of 148 countries, and its poor infrastructure is described by the local business community as representing one of the key problems hampering business development.

3.2. CONDITION OF TRANSPORT SECTOR

Transportation of commodities, materials and products is carried out on two principal routes: via Georgia (Airum – Sadakhlo and Bagarashen – Sadakhlo) and via Iran (Agarak – Norduz). The Georgian route is currently the preferred alternative, because the Black Sea ports Poti and Batumi are the closest ones with access to sea and link Armenia with its major trading partners, i.e. Russia, CIS, Europe and Americas; the available railroad provides unhindered and low-cost options for delivery of containerized cargoes to the above seaports; there are rail-enabled ferries providing crossing service from Poti (Georgia) to Ilyichevsk (Ukraine) and from Poti to port Kavkaz (Novorossiysk, Russia); trucking routes to destinations in Russia and CIS pass through the checkpoint Verknihy Lars, as well as by ferry via Poti (e.g. Ukraine, Poland); in winter time, when the road through Verknihy Lars is rough, an alternative route may be chosen: by ferry service Poti - Novorossiysk; trucking traffic routes to Europe mostly pass by the ferry service in Poti to any port of your choice, as well as via Turkey (Checkpoint "Sarpi").

Freight traffic flows from Middle East and Far East, as well as other Asian countries are channeled to Armenia mainly via the Iranian Persian Gulf port Bandar-Abbas. This is an expensive route, because the motor road passes across almost the entire territory of Iran (2,360 km). The road from Meghri to Julfa (Iran), next via the Caspian ports Bandar, Anzali and Noushekhr, next by ferry to the Russian cities Olya, Astrakhan and Makhachkala, linking Armenia with Russia, may be considered as an alternative to the Georgian road only in case of emergency.

Armenia to a large extent depends on imports (in 2012 the share of imports in the GDP was 49.3%9), and a considerable portion of their cost comes from transport overheads.

The transport system of Armenia is very inefficient in terms of logistical support. Most of the infrastructure facilities were built during the Soviet times, and they were designed in reliance on channeling some freight traffic flows across the eastern and western borders of Armenia. In the current political context (economic and political blockade of the country by Azerbaijan and Turkey) all trading traffic corridors are located in the North and South, which creates a situation where one part of the existing transport infrastructure is overloaded, whereas the other facilities are, in fact, idling and gradually fall out of service.

The climate in Armenia (continental with heavy snowfall and low temperatures in winter) adversely impacts on performance of the Armenian transport system and contributes to increasing domestic transportation costs.

In addition, the high transport overheads in Armenia are due to the severely worn down condition of the existing infrastructure. According to the Global Competitiveness Index 2013-2014, in the category of road infrastructure condition Armenia ranks 82nd (of 144 countries), condition of railroad infrastructure - 69th, airport and airfield infrastructure - 66th (scoring 3.7, 2.6 and 4.5, respectively).

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9 World development indicators. World bank.
respectively, on scale from 1 to 7). On quality of road and rail infrastructure RA slid down over the last year, respectively, by 2 and 3 positions.

The Logistics Performance Index (LPI) measurements also demonstrate a relatively poor condition of the transport infrastructure of Armenia: in 2014 in the category of quality of infrastructure RA ranked higher than only Kyrgyz Republic among all the ACF member countries, matched the quality level of Kazakhstan and Tajikistan, and was far below the average rating of Europe and Central Asia (ECA)\textsuperscript{10}.

\textsuperscript{10} For comparison, LPI measurements are also provided for some other countries.
In 2012 the Armenian transport system carried 12.1 million tons of various kinds of freight (28.6% by rail, 56.6% by road, 0.1% by air, 14.7% by main pipelines) and 249.8 million passengers (0.2% by train, 82.9% by passenger transport, 7.2% by taxi cabs, 0.7% by air, 9% by electric transport). Following the disintegration of the USSR the Republic of Armenia inherited a relatively extended and ramified motor road network. The total length of public roads at the end of 2012 was equal to 7,749 km, including transnational roads of a total length of 1,730 km, 4,057 km – national and 1,962 km – local roads. The motor road density in Armenia at the end of 2012 was 261.9 km per 1,000 km². Despite its partial isolation, the road infrastructure of the Republic of Armenia is extremely important for international road traffic. Three main highways of the Asian Highways network (AH 81, AH 82, AH 83) run across the territory of RA providing links between most countries in the Asian region and with EU countries.

Source: World Bank. Logistics Performance Index

Ibid
Road corridors AH81 and AH82 (North-South) potentially have the opportunity, along with other highways of the network running through Turkey, to take over the freight and passenger traffic flows between Central Asia and Europe, because, in fact, they provide access to the AH1 corridor heading toward the Black Sea ports of Georgia.

Road transport is the key transportation facility in Armenia both for freight and passengers. Between 2007 and 2010 in Armenia there was a trend to increasing the share of motor traffic (from 57% in 2007 to 59% in 2009), but in 2011, due to a dramatic reduction in domestic road traffic, this indicator dropped to 50.9%. In 2012 the trend to increasing the share of road transport was back on track, and it reached 56.6%.

The road infrastructure is basically designed to fit into the domestic logistical support system: in 2011 its share was 78.5%, and the share of export-compliant logistical centers was 4.9%, and import service logistical units account for 16.6%. However, in recent years the importance of road transport for international trade of RA has increased: in 2011 motor transport traffic accounted for 4.9% of the total export and 15.6% import traffic, whereas in 2007 they were equal to 4.8% and 11.9% respectively.

The key problem with the motor road network of Armenia is progressive deterioration of its existing infrastructure. At the same time in recent years budget allocations for maintenance of the infrastructure in adequate condition have not increased, whereas expenditures for rehabilitation and construction of new roads have dwindled. At the beginning of 2010 the most serious road infrastructure problems were found on regional and local roads: more than 62% of such roads required major repairs and rehabilitation. Domestic and international motorways were in a better condition: 10% of them required urgent capital repairs and rehabilitation. Transnational highways of Armenia in 2009 on the average scored 4.9 by IRI scale, which shows that the quality of pavement is "medium-low". The same index for domestic roads was equal to 8.6 m/km.

The motor road network in RA is characterized by a high and constantly increasing incidence of road accidents. In 2009-2011 the number of road accidents in Armenia grew by 16% from 2,002

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14 Armenia’s Transport Outlook 2011, Asian Development Bank
15 International roughness index This ratio indicates the extent of negative impact of the road pavement on the motor vehicles (ranging from 2 to 16, the higher the level, the stronger the negative impact). The target level is assumed to be equal to 2 m/km, the index value below 4 m/km is accepted to be admissible according to international practices, and IRI for soil road sections may vary within 10 to 16 m/km.
to 2,319 annually. The Feasibility Study for the ADB investment program, prepared in 2010, describes the road safety as one of the critical problem areas in the transport sector of the Republic of Armenia.

Top priority projects for the development of the Armenian transport system are Construction of the North-South Road Corridor linking the southern border of Armenia with Georgia; Sustainable Public Transport in Yerevan; Rural Roads Rehabilitation Project; Rehabilitation of Road Sections Antaramej-Dzoravank-Dprabak-Aigut-Martuni-Getik-Ttujur-Chambarak-Agberk-M14. The above projects will be implemented with funds borrowed from international financial institutions.

The proposed implementation of the projects of rehabilitation of Armenian roads will bring substantial economic benefits: the weighted average increase in the speed of traffic on certain road sections after rehabilitation projects is currently estimated at 38.4%; the projected reduction of transport overheads on these roads varies from 20 to 50%.

The principal government agency responsible for management of the Armenian transport system is the Ministry of Transport and Communications of the Republic of Armenia. The Ministry prepares strategic development plans for the transport sector, compiles transport support programs, drafts relevant regulatory documents and laws of RA. The responsibility for hands-on preparation of the programs and for project implementation supervision in the transport infrastructure area rests with the relevant departments of the Ministry.

The Armenian laws defining the procedures and compensation policies for potential resettlement programs that may eventually be warranted in the course of implementation of the above infrastructural projects, are, in principle, consistent with the requirements specified by international financial institutions. However, there do exist differences in matters relating to the protection of unregistered rights of land use (in RA the absence of such rights invalidates compensation claims) and in respect of compliance with transparency requirements for resettlement procedures and land acquisition (the Armenian legislation does not require mandatory publication of interim results of resettlement and property acquisition). As a rule large-scale infrastructural projects funded by financial institutions, are implemented in Armenia with due account of the resettlement and compensation policies of IFIs. The costs of resettlement and land acquisition for the road improvement projects in Armenia are location-specific and vary from 3% to 35% of the total project cost.

The selection of construction contractors and design organizations, as well as consultants to supervise implementation of road rehabilitation projects in Armenia (including with the participation of the International Bank for Reconstruction and Development, Asian Development Bank and the European Bank for Reconstruction and Development), will be performed on the basis of International Competitive Bidding procedures. In implementation of road improvement projects in Armenia the following consulting companies were involved: SAFEGE and Egis International; Corsan Corviam Construccions is responsible for management of project construction works.

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17 Estimated based on public information on road improvement projects of the International Bank for Reconstruction and Development and the Asian Development Bank in Armenia (Lifeline Roads Improvement Project, Rural Roads Rehabilitation Project, North-South Road Corridor)
19 Estimated based on public information on road improvement projects of the Asian Development Bank in Armenia (Rural Roads Rehabilitation Project, North-South Road Corridor)
One significant constraint hampering the development of the road infrastructure of Armenia, alongside with the insufficient funding, is low performance quality of local construction organizations (obsolete construction equipment and lack of skilled professionals) and of suppliers of road construction materials.

3.3. OVERVIEW OF TRANSPORT CORRIDOR

The "North-South" Road Corridor links Central Asia and India with Iran, Georgia, Russian Federation and Europe. The corridor passes across Armenia from South to North (Megri-Kapan-Goris-Yerevan-Ashtarak-Gumri-Bavra), links up from South with the Georgian road, leading to seaports Poti and Batumi (Black Sea) and on toward Russia, CIS and EU. The North-South road is also a section of the AH 82 international highway (from the Russian border towards Iran), which is part of the Asian Highways international road network linking Central Asian countries: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, etc.

Figure 4. Map of North-South Road Corridor

![Map of North-South Road Corridor](source: Google Maps)

The M2 road (southern route of the North-South Road Corridor) is the only overland route linking Armenia with Iran, and in future it may be used as a transit link from India and Iran leading westwards.

The M1 road (northern route of the North-South Road Corridor) connects the Republic of Armenia via Georgia with the Russian Federation and provides access to the Georgian sea ports Poti and Batumi, which are important transshipment terminals for international trade with EU countries.
Table 5. Main Central Armenia-West International Routes

<table>
<thead>
<tr>
<th>Route</th>
<th>Total</th>
<th>Territory of Armenia</th>
<th>Territory of Georgia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yerevan-Batra-Akhaltshka-Batumi-Poti</td>
<td>16.9 117.0 172.0 70.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yerevan-Batumi</td>
<td>449.9</td>
<td>173.8</td>
<td>276.1</td>
</tr>
<tr>
<td>Yerevan-Poti</td>
<td>519.9</td>
<td>173.8</td>
<td>346.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Route</th>
<th>Total</th>
<th>Territory of Armenia</th>
<th>Territory of Georgia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yerevan-Batra-Akhaltshka-Khashuri-Poti-Batumi</td>
<td>160.9 117.0 76.0 215.0 70.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yerevan-Batumi</td>
<td>638.9</td>
<td>173.8</td>
<td>465.1</td>
</tr>
<tr>
<td>Yerevan-Poti</td>
<td>568.9</td>
<td>173.8</td>
<td>395.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Route</th>
<th>Total</th>
<th>Territory of Armenia</th>
<th>Territory of Georgia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yerevan-Batra-Akhaltshka-Khashuri-Poti-Batumi</td>
<td>696.7 205.7 491.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yerevan-Poti</td>
<td>626.7</td>
<td>205.7</td>
<td>421.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Route</th>
<th>Total</th>
<th>Territory of Armenia</th>
<th>Territory of Georgia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yerevan-Gogovan-Tbilisi-Khashuri-Poti-Batumi</td>
<td>169.2 130.0 142.2 15.0 70.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yerevan-Batumi</td>
<td>726.2</td>
<td>169.2</td>
<td>557.0</td>
</tr>
<tr>
<td>Yerevan-Poti</td>
<td>656.2</td>
<td>169.2</td>
<td>487.0</td>
</tr>
</tbody>
</table>

In the North of Armenia the North-South Road Corridor abuts the three border crossings to Georgia (Bagratashen (M-6) Djaramut (M-3), Bavra (M-1)), and in the South - one crossing to Iran (Meghri (M-2)). Freight traffic from Georgia mainly consists of trucks from Russia and the CIS as well as Europe and Turkey (no direct road links between Armenia and Turkey are available, but Turkish vehicles may enter via Georgia). Freight traffic flows, coming in from the Iranian border, generally consist of trucks with Iranian license plates.\(^{20}\)

The highest density of traffic on the Road is registered in the area of Yerevan and in the adjacent economically active regions (Table 1).

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\(^{20}\) ADB technical assistance report, Preparing the North-South Road Corridor Development Project, PADECO Co., Ltd., 2010
Table 6. Average daily traffic count for different road sections of North-South Road Corridor

<table>
<thead>
<tr>
<th>Location</th>
<th>Cars</th>
<th>Pickup trucks</th>
<th>Vans</th>
<th>Buses</th>
<th>2-suspension trucks</th>
<th>3-suspension trucks</th>
<th>4-suspension trucks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1 Bavra</td>
<td>214</td>
<td>40</td>
<td>30</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>9</td>
<td>295</td>
</tr>
<tr>
<td>M2 (16th km)</td>
<td>9,163</td>
<td>944</td>
<td>824</td>
<td>164</td>
<td>447</td>
<td>521</td>
<td>269</td>
<td>12,332</td>
</tr>
<tr>
<td>M2 (228th km)</td>
<td>1,170</td>
<td>114</td>
<td>142</td>
<td>14</td>
<td>72</td>
<td>127</td>
<td>117</td>
<td>1,756</td>
</tr>
<tr>
<td>M2 (270th km)</td>
<td>520</td>
<td>83</td>
<td>48</td>
<td>3</td>
<td>46</td>
<td>125</td>
<td>95</td>
<td>920</td>
</tr>
<tr>
<td>Including those with Iranian license plates</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>8</td>
<td>87</td>
<td>122</td>
</tr>
<tr>
<td>M2 (296th km)</td>
<td>2,357</td>
<td>229</td>
<td>203</td>
<td>36</td>
<td>158</td>
<td>216</td>
<td>66</td>
<td>3,265</td>
</tr>
</tbody>
</table>

Source: Project Business Plan, ADB technical assistance report, Preparing the North-South Road Corridor Development Project, PADECO Co., Ltd., 2010

Any potential traffic buildup will be limited by the extensive wear of the existing road pavement and complex route terrain (especially in the southern part), as well as by the availability of alternative routes via Azerbaijan and Turkey. This road is important for international freight and passenger traffic in the current context in view of the closed borders with Turkey and Azerbaijan, but in the long term, after the proposed rehabilitation of the road corridor, the competitiveness of Armenia as a transit country may be significantly upgraded.

The North-South Corridor road pavement is characterized by uniform and heavy wear along its entire length (Table 7); in addition, the road in most of its sections is a two-lane driveway, and therefore does not comply with the standards of international road corridors (including those of the Asian Highways).

Table 7. Condition of some sections of North-South Road Corridor

<table>
<thead>
<tr>
<th>Road section</th>
<th>Average IRI</th>
<th>Length of section</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1 Bavra (173rd km) – Gumri (130th km)</td>
<td>5.82</td>
<td>43</td>
</tr>
<tr>
<td>M1 Gumri N. (119th km) – Talin (70th km)</td>
<td>5.79</td>
<td>49</td>
</tr>
<tr>
<td>Talin (70th km) – start of 4-lane driveway (30th km)</td>
<td>N/A</td>
<td>40</td>
</tr>
<tr>
<td>30th km – Yerevan (9th km)</td>
<td>N/A</td>
<td>18</td>
</tr>
<tr>
<td>Yerevan – Ararat (47th km)</td>
<td>N/A</td>
<td>38</td>
</tr>
<tr>
<td>Ararat (47th km) – Yeraskh (65th km)</td>
<td>5.39</td>
<td>18</td>
</tr>
<tr>
<td>Yeraskh (65th km) – M-2/M-10 (120th km)</td>
<td>7.06</td>
<td>55</td>
</tr>
<tr>
<td>M-2/M-10 (120th km) – Me/Djermuk (147th km)</td>
<td>6.33</td>
<td>27</td>
</tr>
<tr>
<td>Me/Djermuk (147th km) – Goris (238th km)</td>
<td>6.86</td>
<td>91</td>
</tr>
<tr>
<td>Goris (238th km) – Kapan (300th km)</td>
<td>7.22</td>
<td>62</td>
</tr>
<tr>
<td>Kapan (300th km) – Kajaran (328th km)</td>
<td>5.08</td>
<td>28</td>
</tr>
<tr>
<td>Kajaran (328th km) – Border with Iran (383rd km)</td>
<td>5.67</td>
<td>55</td>
</tr>
</tbody>
</table>

Source: Project Business Plan; estimates based on measurements of Directorate of Road Network of Armenia.

Currently the rehabilitation work is ongoing on three sections of the northern part of the corridor (total length 96 km).
3.4. PROJECT DESCRIPTION

3.4.1. Objectives

The Project requires commitment of funds by the Anti-Crisis Fund for an investment loan to finance construction work on one section of the North-South Road Corridor in the Republic of Armenia as part of Phase 4 of the comprehensive investment program “Development of North-South Road Corridor”.

Phase IV of the North-South Road Corridor investment program makes provision for construction of a new and rehabilitation of the existing road between the Iranian border and the city of Ararat (total length 330 km).

Figure 8. Project Site Map


This Project requires financing of construction and rehabilitation works on the southern road section in accordance with Phase IV of the investment program (20.5 km from Agarak towards Kajaran).

The Project pursues several key objectives, including laying the ground work for effective export and import traffic on the road network of Armenia, as well as improving the transit capacity of the country, while mitigating the risks, associated with motor road traffic in the South of Armenia. The risks of drivers and transport companies will be reduced by improving traffic safety on the newly built and rehabilitated road sections, as well as by mitigating the adverse impacts of weather conditions extending travel time and overheads, sustained in overcoming such problems.

In addition to the above primary objective the Project also has a number of secondary tasks to accomplish. Rehabilitation and construction of the Road Corridor must ensure establishment of new economic and social ties between the southern and central regions of the country, reduce the national budget expenses for current maintenance of the road section, as well as provide access for remote communities to basic social and educational infrastructure.
3.4.2. Current Status

The comprehensive North-South Road Corridor Project is one of the top priorities in the development of road traffic network of the Republic of Armenia, which is reflected in the "Program of Economic Development of the Republic of Armenia for 2013-2015". Rehabilitation and construction of the road corridor is carried out with financial support of the Asian Development Bank and the European Bank for Reconstruction and Development. The disbursement of the Loan for the Project will proceed in tranches. In preparing of the program for funding of the road corridor rehabilitation, the Government of the Republic of Armenia and the Asian Development Bank have divided the Project into the following road sections: Bavra-Gumri, detour around Gumri, Talin-Gumri, Ashtarak-Talin, Ashtarak-Artashat, Artashat-Kajaran, Kajaran-Agarak.

Figure 9. Sections of North-South Road Corridor

According to preliminary estimates the cost of rehabilitation of the entire road corridor will exceed US$ 1.5 billion. At this stage the Asian Development Bank along with other donors has committed funds to finance the rehabilitation of three sections of the road corridor.

The first tranche is intended to finance Ararat-Ashtarak road section. The construction work funded by the first tranche is divided into two construction components:

The first component consists of rehabilitation of the road section Yerevan-Ashtarak (11.4 km), the second component - rehabilitation of the road Yerevan-Artashat (19.6 km) and road safety improvement on the road Artashat-Ararat (18.5 km). 12 October, 2009 the Asian Development Bank and the Republic of Armenia signed a loan agreement on funding rehabilitation work on the above road sections. The total funding requirement for phase I of the Project is US$ 70 million, of which amount US$ 60 million is expected to be provided by the Asian Development Bank and US$
10 million - own funds of the Republic of Armenia. Construction work on the above sections will be carried out by CORSAN-CORVIAM CONSTRUCCION, a Spanish corporation, and technical supervision of the Project implementation is the responsibility of the French-Spanish joint venture SAFEGE EPTISA.

The second tranche will finance rehabilitation work on the road corridor section from Ashtarak to Talin (41.9 km). The loan agreement for this tranche was signed by RA and ADB on 30 May, 2011; the total amount of the tranche committed by the Asian Development Bank is equal to US$ 160 million; co-financing by Armenia in the amount of US$ 10 million. The construction work on this section consists in expanding the existing road from 2 to 4 lanes. The construction contractor for this road section is also CORSAN-CORVIAM CONSTRUCCION, and the technical supervision of the Project implementation will be carried out by the joint venture of SAFEGE (France) and EPTISA (Spain).

The third tranche will provide funding for construction work on the road section Talin-Gumri (total length 46.17 km), and for the preparation of a feasibility report for the fourth tranche as part of the comprehensive project and long-term plan for the development of the road network of RA, including a system of management of road assets and administration of transport system maintenance services. The total cost of work funded by this tranche is estimated at approximately US$ 200 million, of which US$ 100 million will be provided by ADB under the loan agreement signed in March 2014, and an additional EUR 72 million will come from the European Investment Bank (EUR 60 million - as a loan, EUR 12 - million as a grant), pursuant to the loan agreement signed in November 2013. The construction contractor and consultant for implementation supervision have not yet been selected.

Egis International (France) will be contracted as Project Design Organization for all the three phases. The feasibility study for the fourth tranche (Kajaran-Agarak) was also prepared by Egis International.

On 19 December, 2012 the Manager received a preliminary application of the Ministry of Finance of RA for a loan to fund rehabilitation of the road financed under Phase IV of the above program. On 26 June, 2013 the Fund Council endorsed the Project concept and the Manager's Appraisal of the preliminary application.

On 23 May, 2014 the Manager received Armenia’s formal request for ACF funding of the Project with its Investment Loan Application and Project Feasibility Report.
3.4.3. **Technical Parameters**

According to the feasibility study, the southern part of Phase IV of the road corridor (from Kajaran to Agarak) is divided into 3 sections. The detailed description of the geometry of each of the road sections is given in Table 10.

**Table 10. Kajaran-Agarak road sections of North-South road corridor**

<table>
<thead>
<tr>
<th>Section</th>
<th>Starting point</th>
<th>Destination point</th>
<th>Length</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1</td>
<td>328 + 600</td>
<td>349 + 500</td>
<td>20.9 km</td>
<td>The section stretches from the entrance to Kajaran at the elevation of 1,700 meters above sea level, passes across Kajaran, then the road runs 12 km uphill to the elevation of 2,535 meters in the area of Meghri (341 + 600). After Meghri it goes 7.4 km down to the elevation of 1,950 meters. Average slope = 7.9%, on some sections it reaches 13.4%. Average horizontal curvature of the road section is 650°/km. Two paved lanes 3 to 3.4 m wide.</td>
</tr>
<tr>
<td>Section 2</td>
<td>349 + 500</td>
<td>379 + 000</td>
<td>29.5 km</td>
<td>For over 30 km the road descends from the elevation of 1,950 meters down to 535 m. Average slope = 4.7%, on some sections it reaches 13%. Average horizontal curvature of the road section is 205°/km. Two paved lanes 3 to 3.4 m wide.</td>
</tr>
<tr>
<td>Section 3</td>
<td>379 + 000</td>
<td>384 + 000</td>
<td>5 km</td>
<td>For over 5 km road runs parallel to the border with Iran and the Arax river. Average slope = 0%, on some sections it reaches 4%. This road section is almost perfectly straight. Two paved lanes 3.35 to 3.4 m wide.</td>
</tr>
</tbody>
</table>

**Source:** Project Business Plan, Feasibility Study, Egis International, April 2014.

The road pavement on the Kadzharan-Agarak road section is severely worn out. The average IRI for this road as measured by Egis International and by the Directorate of Road Network of Armenia is 5.76 m/km, while the target level is equal to 2 m/km. The first road section is in the poorest condition, which is due to its complex route terrain.
The design solution proposed by the project design Consultant for the first section of the Kajaran-Agarak road requires construction of a new road (category I) with a 4.7 km tunnel. There is a need to build a four-lane road on this section outside and a two-lane road inside the tunnel. If the proposed tunnel is built, the length of the road section will be reduced more than by 50% (from 20.4 to 9.35 km), and the average slope and curvature of the road - from 685°/km to 77°/km. The average width of the road outside the tunnel will be expanded from 6.4 up to 20.5 m, and inside the tunnel - up to 8.5 m.

Regarding the second section the Consultant has proposed two possible alternative solutions for the rehabilitation/rebuilding of the road: rehabilitation and expansion to 4 lanes of the existing road bed outside the city and leaving 2 lanes in Meghri (category II), and construction of a new four-lane category I detour road around Meghri. In the context of the requirements to the road corridor in terms of its throughput capacity and safety as well as to potential land acquisition and resettlement (the road passes through the city center of Meghri), the Consultant and the Ministry of Transport and Communications of RA have made a decision to build a new road on the second road section.

The proposed rehabilitation of the third section of the Kajaran-Agarak road does not require any road realignment, and the rehabilitation work will be concentrated on existing road right-of-way. It is recommended to expand the road to four lanes in accordance with the requirements to category I roads.

It is also recommended to lay concrete pavement along the entire road from Kadjaran to Agarak.

Plans of route realignment on the road section from Kajaran to Agarak are given in Figure 12. The proposed design solution enables building a detour around Meghri and shortens the length of the corridor by 13.4 km.
3.5. PROJECT FUNDING REQUIREMENTS

The Project Funding Requirements are determined based on projected costs of construction of the above road corridor section according to the estimates of Egis International. In working on the Feasibility Report the Consultant has prepared cost estimates for the road section, comprising 5 km of section 3 (rehabilitation of the existing road) and 15.2 km of section 2 on the basis of alternative solution 1 (construction of a new detour road around Meghri). The total amount of funds required for the Project, including contingency expenses and estimated costs of consulting services on the Project engineering and construction supervision (as provided in the cost estimates attached to the Investment Loan Application), is equal to US$ 150 million net of VAT.

In his Appraisal of the preliminary loan application for this Project the Manager made provision for allocation of financial resources for funding the Project in the amount of US$ 100 million. Detailed assessment of the cost estimates for the Project implementation provided by the Consultant in the Feasibility Report demonstrated that the above amount would be insufficient to ensure completion of the Project. The analysis made by the Consultant has shown that another US$ 50 million will be required for this phase of the Project. The Manager recommends to increase the amount of funding of the Project by ACF to US$ 150 million.

The structure of expenses is shown in Table 13.
Table 13. Consolidated cost estimates for construction/rehabilitation of project road section

<table>
<thead>
<tr>
<th></th>
<th>Construction works</th>
<th>Contingency</th>
<th>Design planning and construction supervision consultant</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>S3 (5km)</td>
<td>14,000,000</td>
<td>700,000</td>
<td>629,000</td>
<td>15,329,000</td>
</tr>
<tr>
<td>S2 (A1-15.2km)</td>
<td>123,000,000</td>
<td>6,150,000</td>
<td>5,521,000</td>
<td>134,671,000</td>
</tr>
<tr>
<td>S3+S2(A1) (20.2km)</td>
<td>137,000,000</td>
<td>6,850,000</td>
<td>6,150,000</td>
<td>150,000,000</td>
</tr>
</tbody>
</table>

Source: Project Business Plan

Based on the above cost estimates the Manager recommends ACF to commit US$ 150 million for funding this Project, of which amount up to US$ 137,000,000 to be allocated for financing construction work under the contract for design planning and construction on the above road section, up to US$ 6,150,000 to be allocated for financing preparation of detail design under the contract for design planning and construction on the above road section, and for payment of services of a consultant on project engineering and construction supervision contracted to mitigate reputation, corruption and construction risks, and up to US$ 6,850,000 to be set aside for potential contingency requirements.

The Beneficiary should be required to ensure co-financing of the Project in an amount at least US$ 30 million in the form of exemption from taxes (including VAT) and other regulatory charges imposed on contracts funded by the Investment Loan, and also as budget funds allocated for land acquisition and resettlement for the purposes of the Project.

3.6. ECONOMIC BENEFITS

The Business Plan (BP), submitted by the Ministry of Transport and Communications of the Republic of Armenia, highlights the principal economic and social benefits associated with implementation of the Project. The following areas are identified in the BP as benefits: improvement of the transport system efficiency, reduction of export and import traffic overheads, higher transit capacity of Armenia, growth of employment and reduction of poverty in the Project implementation regions.

Efficiency of the transport system will be improved due to reduction in logistics overheads associated with traffic of goods and passengers, as well as shorter delivery time. From this perspective, the efficiency of the Project can be evaluated by cost-benefit analysis of its implementation results. The analysis provided by the Directorate of Road Network of Armenia, describes as benefits the potential reduction in maintenance costs of vehicles per 1 kilometer, shorter road section travel time, as well as lower maintenance costs on a road section of the Project; and capital outlays for the road rehabilitation and construction are shown as costs.

The economic assessment was carried out by the Consultant on the basis of comparison of the "project" and "no project" scenarios. According to the "no project" scenario the road will be subjected to basic maintenance (for the project road it will involve patching, sealing of cracks and
periodic surface repairs), whereas structural damages of the pavement will not be fixed, and the road condition will continue to deteriorate. The "project" scenario requires construction of a new road on road section 2 and rehabilitation of the existing road on section 3.

The economic assessment of the Project provided in the BP was carried out by the Consultant based on the following assumptions on future traffic flows along the Project road:

<table>
<thead>
<tr>
<th>Kajaran-Agarak</th>
<th>AADT</th>
<th>Type of vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Passenger cars</td>
</tr>
<tr>
<td>2,013</td>
<td>1,922</td>
<td>1,430</td>
</tr>
<tr>
<td>2,017</td>
<td>2,570</td>
<td>1,911</td>
</tr>
<tr>
<td>2,020</td>
<td>3,148</td>
<td>2,341</td>
</tr>
<tr>
<td>2,025</td>
<td>4,056</td>
<td>3,016</td>
</tr>
<tr>
<td>2,030</td>
<td>4,895</td>
<td>3,639</td>
</tr>
<tr>
<td>2,036</td>
<td>6,018</td>
<td>4,474</td>
</tr>
</tbody>
</table>


In projecting traffic flows the Consultant assumed the following values as rates of growth: 2013 – 2020 – 7%, 2020 – 2025 – 5%, 2025 – 2030 – 3.8%, 2030 – 2036 – 3.2%.

To make a detailed analysis of the efficiency parameters of the proposed rehabilitation of the project road section (20.5 km from Agarak towards Kajaran), the Manager requested the MTC of RA to provide a detailed economic assessment report of the Directorate of Road Network of Armenia. **EIRR** of the rehabilitation and construction to be carried out on the above road section has been estimated at **12.7%**, which exceeds the threshold of 12%. The Net Present Value (**NPV**) of the Project is estimated at **US$ 4,401 million**. This indicator represents the net benefits RA will draw from the Project in monetary terms, i.e. the total amount of cost savings for the transport companies and reduced budget expenditures for maintenance, net of amounts invested into rehabilitation of the road corridor, discounted to the current period.

It should be noted that the assessment of cost-effectiveness of the rehabilitation of the project road section was examined separately from any future rehabilitation works for the entire Phase IV of the North-South Road Corridor Project. The above assessment, if it covers the whole of Phase IV, is extremely likely to significantly enhance the effectiveness of the Project implementation.
3.7. SOCIAL, ECONOMIC AND ANTI-CRISIS BENEFITS

The proposed ACF Loan for the modernization of the road will help ensure adequate investments into infrastructure. Given the relatively large share of transport in the structure of GDP, development of the road infrastructure should promote economic diversification and diminish exposure of the economy to external shocks. In addition, the proposed construction projects will enable creation of new jobs and will promote growth of the GDP both in their investment and operational phases. The impact of the ACF Loan on the country's debt sustainability is estimated as negligible. Acceptance of the ACF Loan in the amount of US$ 150 million (1.5% of GDP) on the proposed terms and conditions will not substantially increase the total national debt service burden.

In addition to the direct economic benefits, such as reduction of overheads and travel time for passenger and freight traffic, the proposed project package will bring about significant indirect economic benefits. The project addresses one of the most important structural problems, which is transport isolation. Lower cost of freight transportation and, as a consequence, diminished overheads of foreign trade operations, will have a positive impact on the economic structure by reducing the balance of payments deficit. The above will be achieved by means of the following: by reducing the cost of the transport component in the price of imports (including their non-elastic portion) and by cutting down overheads incurred in export traffic, which will improve competitiveness of the exported goods on external markets.

For Armenia, improved transport infrastructure constitutes a powerful driver in creating a better business environment attracting foreign investments.

In the course of Project implementation new jobs will be created (estimated for a similar project at up to 7,000 man-months, which corresponds to 1,750 jobs based on the average project employment term of 4 months), which will contribute to reduction of unemployment in Armenia. Furthermore, economic activity will be expected to rally due to the development of roadside small businesses (including in remote areas of the country), which will also create additional jobs. Improved employment opportunities will, to a certain extent, contribute to poverty eradication. It should be noted that the rehabilitation of the road corridor will help improve mobility of the population in the regions and increase the trading turnover, which will have a positive impact on the economic development of the Republic of Armenia.

Reduction of transport overheads by improving road safety, higher traffic speed and fuel savings will lower the prices of products, including food. Given the fact that the North-South Road Corridor will link areas with a varying degree of involvement in farming activities, it should be assumed that non-agricultural communities may expect improved food supplies, which will enhance food security. Bearing in mind that poor population is most vulnerable to vagaries on the food market, regular food supplies will definitely be conducive to improved protection of the poor.

Since the project road links locations, which in total account for almost 50% of farming produce of RA, it is only natural to assume that it will promote higher productivity of labor as a result of acceleration in production cycles.

The project will also promote the development of tourism in Armenia. The road runs in the vicinity of the natural, cultural and historic landmarks and sights.
3.8. COMPLIANCE WITH ACF MISSION

According to the Manager the Project is fully consistent with the objectives of the Anti-Crisis Fund. The Project will contribute to enhancement of economic and social stability of the Republic of Armenia, and will reduce the impact of its transport isolation.

As indicated in one of the preceding sections (on social and economic benefits), the Project will improve the efficiency of the Armenian transport system, will strengthen inter-regional relations, increase employment and reduce poverty in the South of Armenia. The above benefits are inalienable components of one of the ACF’s Mission objectives: sustainable development of ACF member countries.

The Project demonstrates a strong integration potential, since the proposed road rehabilitation will not only promote traffic flows between Armenian regions, but will also improve the efficiency of international trade between Armenia and Russia unfold the country's transit capacity for destinations in Russia, Iran and India. The North-South road corridor (or AH 82 according to the Asian Highways terminology) constitutes an integral part of the Asian network of motor roads, which provides links between most of the Asian countries, as well as access to European markets (Figure 3).

As shown on the Matrix of Project Compliance with Fund Mission, developed by the Manager (Appendix 1), the Project is consistent with the Fund's objectives (relevant Project-specific criteria are highlighted as compliant).

The reasoning of the MTC of the Republic of Armenia in support of compliance of the Project with the ACF mission objectives, laid out in the Investment Application are accepted by the Manager as objective and sufficient.

3.9. FUNDING SCHEME

The Republic of Armenia will act as the Investment Loan Beneficiary, and the Ministry of Finance and the Ministry of Transport and Communications of RA - as the Project implementation agency, which will establish a special group - "North-South Project Implementation Unit". The distribution of responsibilities between the above departments will be addressed during preparation of the Investment Loan Agreement.

The borrowed funds of ACF constitute a sovereign loan and are an integral part of the sovereign external debt liabilities of the Republic of Armenia. The Republic of Armenia will post the funds borrowed from ACF, in its national budget as a source of funding the budget deficit and as an expenditure item for financing a national investment project, as well as it will enter into its national budget the outlays allocated in amounts sufficient for repayment and service of the ACF Loan. The above funding scheme conforms to the “Regulation on the Use of ACF Resources for Providing Investment Loans”.

Upon completion the Project will generate extra revenue for the Republic of Armenia by reducing operation expenses to relatively low levels, as well as by collection of availability charges from users of the corridor roadside infrastructure facilities and from increasing traffic along the corridor.

In the context of rapid growth of external borrowing and debt exposure to external shocks, a zero limit for non-preferential lending was agreed upon under the current IMF program in RA for
the total portfolio of external sovereign and government-guaranteed borrowings. RA undertook to refrain from borrowing and issuance of guarantees for loans that may reduce the average grant-element on the above portfolio to a level below 30% (the current grant-element is equal to 32%). Regarding issues relating to the Project's impacts of debt sustainability of RA, the Manager had consultations with the International Monetary Fund, in the course of which the IMF representatives indicated that the terms of Project financing conditionality are consistent with the IMF program, and that given compliance therewith, the Project will have no adverse impact on the current debt sustainability of RA.

The above requirements contained in the IMF program will need to be approved by the ACF Council to enable departure from the Indicative Terms for ACF financial credits, since the current ACF Indicative Terms for investment loans in Armenia are equivalent to a grant-element of 13.9%, which is below the threshold of 30%, specified by IMF.

In view of the above and given the need for meeting the required size of the grant-element of at least 30%, as well as for compliance with the funding terms and conditions tendered by the other participants in the comprehensive program (ADB, EIB), the Manager recommends to accept the following funding conditions for the requested Loan:

- **Interest rate**: 1.65% per annum;
- **Interest margin**: n/a;
- **Risk premium**: n/a;
- **Front-end fee**: 0.5% of loan amount;
- **Commitment fee**: n/a;
- **Maturity**: 20 years, including 5 years of grace period;
- **Cofinancing amount due from Beneficiary**: 20% of Project cost.

The grant-element for the above funding terms is equal to 31.75%.

3.10. GOVERNMENT SUPPORT

The application for funding the Project has been submitted by the Ministry of Finance of RA. The Project will be implemented by a special department of the Ministry of Transport and Communications of RA, i.e. "North-South Investment Program Implementation Unit".

The Government of the Republic of Armenia ensures co-financing of the Project in an amount at least US$ 30 million in the form of exemption from taxes (including VAT) and other regulatory charges imposed on contracts funded by the Investment Loan, and also as budget funds allocated for land acquisition and resettlement for the purposes of the Project.

The program of the North-South Road Corridor is included in the "Program for Economic Development of the Republic of Armenia for 2013-2015" as one of its key priorities.

The list of principal regulatory and legal documents, as well as articles of association pertaining to the Project, is given in the Table (see below).
3.11. ENVIRONMENTAL IMPACT ASSESSMENT


The Consultant has made a preliminary environmental impact assessment of the Project in accordance with the requirements of the ADB. The above assessment by the Consultant highlighted the following three Project-related issues that are critically sensitive for the environment and cultural heritage:

- The project road runs across the national park Arevik;
- The proposed alignment of the road locates it in close vicinity of some cultural heritage sites;
- Due to the presence of a number of mining companies close to the Project road route, soil contamination should be considered as potential hazard.

In view of the above points, the Consultant assigned category "A" to the Project according to the classification of the Asian Development Bank.

In accordance with the requirements of the ADB for category "A" projects the following preliminary measures should be taken: prepare an EIA report; organize public hearings (at least 2 sessions); prepare EI Management Plan and Budget; prepare and publish a government report on EIA of the Project. The Manager recommends to make provision for meeting the above requirements as a
precondition for financing construction contracts under the design planning and construction contract.

MTC of RA should assume the responsibility for ensuring implementation of the Project in accordance with ADB's safeguards policy, as well as for taking appropriate steps and preparation of relevant documents as required by such policy, insofar as it is not inconsistent with the Environmental and Social Safeguards Policy of EDB.

In accordance with the Framework Agreement between the Manager and ADB, endorsed by the ACF Council, the ADB Safeguards Policy will apply for the purposes of the Project. The Investment Application also makes reference to the Armenian Government's readiness to comply with the ADB safeguards in carrying out implementation operations, which should mitigate environmental hazard risks.

3.12. SOCIAL IMPACT ASSESSMENT

According to the Report on land acquisition and resettlement, provided by the Consultant (Egis International), the total number of households, that will be affected by the Project, will be 350, of which 330 will suffer from the acquisition of land, that will be required for the construction of the road corridor project section (194 households - acquisition of farming land, 86 households - acquisition of non-farming land, 50 households - acquisition of other types of land), and 20 - in connection with the need to relocate their houses. Also, during construction one commercial building will have to be purchased. The total cost of land acquisition and resettlement for the whole Kajaran-Agarak road section area, as estimated by the Consultant, is equal to US$ 4.6 million (all estimates apply to alternative 1).

The costs of the potential land acquisition and resettlement for the purposes of the Project will be financed from the national budget of Armenia.

In accordance with the Framework Cofinancing Agreement between the Manager and ADB, endorsed by the ACF Council, the ADB resettlement policies will apply for the purposes of the Project. The Investment Application also confirms the Armenian Government's readiness to comply with the ADB safeguards in respect of the resettlement issues, which should help mitigate risks of potential adverse social consequences of the Project.

The Manager recommends to make provision for preparation of the Plan for land acquisition and resettlement as a precondition for financing construction contracts under the design planning and construction contract.

MTC of RA assumes the responsibility for ensuring implementation of the Project in accordance with ADB's resettlement policies, as well as for adjusting the Project parameters in conformity therewith, insofar as they are not inconsistent with the Environmental and Social Safeguards Policy of EDB.
## 3.13. RISK ASSESSMENT

<table>
<thead>
<tr>
<th>Risk group</th>
<th>Description</th>
<th>Assessment of risk level</th>
<th>Impact on Project performance</th>
<th>Risk mitigation measures</th>
<th>Risk assessment following mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design risks</td>
<td>Risks of design errors and poor quality of design documentation</td>
<td>Medium</td>
<td>High</td>
<td>These risks can be reduced if the Manager participates in negotiations on terms and conditions of the construction contract and in preparation of the Project detail design by the Consultant, responsible for implementation supervision.</td>
<td>Low</td>
</tr>
<tr>
<td>Construction risks</td>
<td>Risks of inflated cost of Project as compared with relevant parameters of FR.</td>
<td>High</td>
<td>Medium</td>
<td>Participation of the Manager in review and approval of design documentation. International Competitive Bidding according to IBRD procedures. Provision in the agreement for penalties for exceeding cost estimates of construction. Building sufficient contingency reserve funds.</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Risks of failure to meet the schedule of Project implementation as compared with relevant parameters of FR.</td>
<td>High</td>
<td>Medium</td>
<td>Participation of the Manager in review and approval of design documentation. Provision in the design documentation for penalties for delayed construction. Continuous monitoring of Project progress.</td>
<td>Medium-High</td>
</tr>
<tr>
<td>Operating risks</td>
<td>Risks of insufficient funding of scheduled maintenance of the road corridor section.</td>
<td>High</td>
<td>High</td>
<td>Monitoring by the Beneficiary of the operation performance of the road corridor, including by IRI, throughput capacity measurements, etc., and updating the plan of maintenance funding in case of departure from the pre-set parameters.</td>
<td>Medium</td>
</tr>
<tr>
<td>Engineering risks</td>
<td>Risks of non-conformity of the proposed engineering solution to the regulatory requirements to the road corridor.</td>
<td>Medium</td>
<td>Medium</td>
<td>Flexible approach to selection of engineering standards for design planning. Normally refer to the Building Code (SNIP) of RA, and in case of any deficiencies in it, turn to AASHTO or other international standards.</td>
<td>Low</td>
</tr>
<tr>
<td>Supplier risks</td>
<td>Risks arising from inadequate capacity of suppliers of construction materials and problems of delivery to the construction site.</td>
<td>High</td>
<td>High</td>
<td>Detailed analysis of the available capacity of construction materials suppliers and transport companies and due consideration of the data collected in design planning. Provision</td>
<td>Medium</td>
</tr>
<tr>
<td>Risk Type</td>
<td>Description</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
<td>-----</td>
<td>--------</td>
<td>-----</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Financial risks</td>
<td>Beneficiary's insolvency risks</td>
<td></td>
<td>Low-Medium</td>
<td>High</td>
<td>The key factor enabling reduction of this risk lies in the provision of cross-default conditions in the draft Agreement. Similar conditions are specified in RA by other leading IDBs.</td>
</tr>
<tr>
<td>Environmental risks.</td>
<td>The Project may have an adverse impact on the environment.</td>
<td></td>
<td>High</td>
<td>High</td>
<td>In order to reduce such risks environmental impact assessment will be carried out in accordance with the ADB policies. The Manager recommends to make provision in the agreement for preparation of a report on EIA and an EI Management Plan, State environmental impact assessment of the Project and public hearings as a precondition for financing the construction contract.</td>
</tr>
<tr>
<td>Social risks</td>
<td>The Project may have an adverse impact on the social structure of local communities living in the vicinity of the road corridor.</td>
<td></td>
<td>High</td>
<td>High</td>
<td>In order to reduce such risks social survey and assessment will be conducted in accordance with the ADB safeguards. The Manager recommends to make provision in the agreement for preparation of the Plan for land acquisition and resettlement as a 'condition precedent' for entering into force of the Loan Agreement.</td>
</tr>
</tbody>
</table>
| Legal risks             | Risks related to inappropriate interpretation and, as a consequence, non-performance (delayed performance) under the Investment Loan Agreement and all related documents, other than legislation of RA. Risks associated with the need of suppliers to obtain permits, licenses and other documents as required by the Armenian legislation or relevant international treaties. |     | High   | Medium | The principal risk reduction factors are:  
  ▪ Signing by the Manager of the Investment Loan Agreement directly with RA and its ratification in due process, which will upgrade its status to that of an international agreement, and will thus ensure its precedence over national legislation of RA;  
  ▪ Provision in the Agreement for penalties, which may be applied in case of breach by the Beneficiary of any provision thereof. |
| Corruption and fiduciary risks | In the process of funding the Project corruption and fiduciary risks may arise in connection with alleged misuse of Loan funds. |     | High   | High | In the process of Project implementation IBRD procurement and disbursement policies and procedures will be used, which provide for financial penalties for violations thereof. For monitoring of procurement provision is made for services of IBRD experts. Compliance review will be performed in accordance with the relevant recommendations of EAG and FATF. |
## Appendix 1. Matrix of Project Compliance with ACF Mission²¹

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Anti-crisis</th>
<th>Integration</th>
<th>Social Stability:</th>
<th>Economic Sustainability:</th>
<th>Environmental Sustainability:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Project implementation in depression-stricken sector</td>
<td>• Growth of mutual investments in EurAsEC countries</td>
<td>• Growth of trade between EurAsEC countries</td>
<td>• Creation of new jobs</td>
<td>• Growth of tax revenue (both directly from project implementation, and indirectly, from creating conditions for development of other industries and/or businesses)</td>
<td>• Project implementation is carried out in compliance with stringent environmental policies (IFI safeguards)</td>
</tr>
<tr>
<td>• Project implementation in sector exposed to crises</td>
<td>• Growth of product items for trading between EurAsEC countries</td>
<td>• Growth of passenger and freight traffic flows in EurAsEC countries</td>
<td>• Creation of new jobs for disadvantaged groups of population</td>
<td>• Development of export-driven sectors</td>
<td></td>
</tr>
<tr>
<td>• Funding of project, whose failure may produce adverse social and economic consequences (threats to food security, energy security, environmental sustainability, sanitary conditions, agricultural production capacity)</td>
<td>• Growth of passenger and freight traffic flows in EurAsEC countries</td>
<td>• Improved access to high quality water resources</td>
<td>• Improvement of food security</td>
<td>• Growth of share of domestic value added products.</td>
<td></td>
</tr>
<tr>
<td>• Implementation of project of strategic importance in the context of increasing budget constraints</td>
<td>• Reduced overheads on traffic of passengers and goods between EurAsEC countries</td>
<td>• Increased access to electric power supply for communities in inaccessible and sparsely populated areas</td>
<td>• Reduction of volatility of prices for food and basic services</td>
<td>• Support of stability of operation of national power supply systems</td>
<td></td>
</tr>
<tr>
<td>• Restoration of sector in the aftermath of armed conflicts, mass riots, etc.</td>
<td>• Reduced transit time for passengers and goods between EurAsEC countries</td>
<td>• Increased availability of basic services (education, health care, etc.)</td>
<td>• Project implementation is with a view to preparation of country to joining Customs Union</td>
<td>• Reduction of logistics overheads</td>
<td></td>
</tr>
<tr>
<td>• Creation of new jobs in the context of growing unemployment</td>
<td>• Improved access (reduced costs and time) to key transport hubs (not necessarily located in EurAsEC) linking EurAsEC countries</td>
<td>• Project implementation is with a view to preparation of country to joining Customs Union</td>
<td>• Provision of access to housing utility services (sewerage, gas supply, district heating) for communities in inaccessible and sparsely populated areas</td>
<td>• Diversification of economy and/or exports</td>
<td></td>
</tr>
</tbody>
</table>

²¹ The Investment Project must comply with one or more criteria in each column of the matrix. The highlighted criteria indicate compliance.
Управляющему средствами Антикризисного фонда Евразийского экономического сообщества - Евразийскому банку развития
Республика Казахстан, 050000
g. Алматы, ул. Панфилова, д. 98
Тел: +7 (727) 244 40 44
Факс: +7 (727) 250 81 58
e-mail: info@eabr.org

В соответствии с Договором об учреждении Антикризисного фонда Евразийского экономического сообщества (далее - Фонд) настоящим направляем Вам Заявку на предоставление из средств Фонда Инвестиционного кредита в сумме 150 млн. долларов США для рассмотрения и подготовки заключения Управляющего средствами Фонда в соответствии с Порядком предоставления инвестиционного финансирования из средств Фонда, утвержденным Советом Фонда.

Запрашиваемые средства Фонда будут направлены на финансирование проекта «Строительство автодорожного коридора «Север-Юг» (4 очередь)», реализация которого будет осуществляться сформированной в Министерстве транспорта и связи Республики Армения группой реализации проекта.

В соответствии с условиями предоставления Инвестиционного финансирования предполагается, что Республика Армения выступит Получателем средств Фонда.

Выделенные из Фонда средства предполагается израсходовать в течение 5 лет, начиная с 2014 года, в соответствии с Руководством Всемирного банка по предоставлению средств на реализацию проектов от 1 мая 2006 года (World Bank Disbursement Guidelines for Projects, dated May 1, 2006).

Возврат средств Фонда предполагается производить в течение 20 лет, льготный период - 5 лет. В соответствии с утвержденными Советом Фонда параметрами, предлагаются следующие условия предоставления Инвестиционного кредита:

ставка процентов, начисляемых на использованную и непогашенную сумму Инвестиционного кредита - 1,65% годовых;
Премия за риск – 0%, начисляемая на снятую и непогашенную сумму Инвестиционного кредита сверх Процентов;
комиссия за резервирование – не применяется;
единовременная комиссия – 0,5% от суммы Инвестиционного кредита.

Для проведения оценки Проекта в приложении к настоящей заявке направляем Инвестиционную заявку, содержащую информацию о проектной компании и о Проекте. Настоящим удостоверяем, что указанная в прилагаемой Инвестиционной заявке информация является полной и достоверной и может быть подтверждена в случае необходимости документально. Выражаем согласие на полную проверку достоверности указанных в Инвестиционной заявке данных. Обязуемся своевременно информировать Управляющего средствами Фонда обо всех изменениях данной информации и представлять по Вашему запросу все необходимые для подтверждения представленной информации документы, а также любую обоснованно запрошенную дополнительную информацию.

Приложения:
Инвестиционная заявка на 39 л.
Отчет о технико-экономическом обосновании Проекта в 5 альбомах.
Экономический отчет по Проекту консультанта на 4 л.
План переселения Проекта на 47 л.
Рамочная программа экологической оценки и экологического обзора 71 л.
Электронный носитель 1 шт.
Документы, удостоверяющие полномочия лиц, подписавших Заявку и Инвестиционную заявку на 5 л.

Хачатрян Г. Г.
Attn: Eurasian Development Bank
Resources Manager of the Anti-Crisis Fund
of the Eurasian Economic Community

Republic of Kazakhstan, 050000
Alamaty, 98 Panfilov St.
Phone: +7 727 244 40 44
Fax: +7 727 250 81 58
e-mail: info@eabr.org

In accordance with the Treaty on Establishment of Anti-Crisis Fund of Eurasian Economic Community (hereinafter – the Fund) please find enclosed herewith our Application for Investment Loan in the amount US$ 150 million for review and appraisal by the Resources Manager of the Fund as required by the ACF Regulation on Investment Loans approved by the Fund Council.

The requested funds will be used for financing the Project “Construction of North-South Road Corridor (Phase IV)”, which will be implemented by the Project Implementation Unit established by the Ministry of Transport and Communications of the Armenia.

According to the conditions of investment funding the Republic of Armenia will act as the ACF Loan Beneficiary.

The funds to be provided by the ACF will be drawn down within 5 years, beginning from 2014 in accordance with the World Bank Disbursement Guidelines for Projects, dated 1 May, 2006.

Repayment of the Fund’s Loan will be carried out during 20 years with a grace period of 8 years. Based on the Fund Council’s endorsed parameters we hereby request you to consider the following conditions for approval of the above Investment Loan:

- Interest rate charged on disbursed and undisbursed amounts of Loan: 1.65% per annum;
- Risk premium: 0%, charged on disbursed and unrepaid amount of Investment Loan on top of interest rate;
- Commitment fee: n/a;
- Front-end fee: 0.5% of Investment Loan amount;

For the appraisal of our Project please find attached to this request our Application for Investment Loan, which contains information on the Project Company and on the Project. We hereby certify that the information attached to the above Application is true and complete and, if necessary, can be supported by relevant documents. We hereby consent to any verification of the data provided therein. We hereby undertake to report to you in due course any changes in the above data and any documents in support of the information provided, as well as any other reasonable data you may request.

Enclosure:
- Investment Application - on 39 pages
- Feasibility Report - 5 albums
- Consultant’s Economic Assessment Report - on 4 pages
- Resettlement Plan - on 47 pages
- Framework Environmental Impact Assessment and Review Program - on 71 pages
- Electronic media – 1 CD
- Authorization documents for signatories of the Request and Investment Application - on 5 pages

Signed

G. Khachatrian
Appendix 3. Key Macroeconomic Performance Indicators of Armenia

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>GDP (growth compared to previous year, %)</strong></td>
<td>5.853</td>
<td>9.6</td>
<td>13.2</td>
<td>13.9</td>
<td>10.1</td>
<td>14</td>
<td>13.198</td>
<td>13.749</td>
<td>6.948</td>
<td>-14.15</td>
<td>2.2</td>
<td>4.7</td>
<td>7.2</td>
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<tr>
<td><strong>GDP per capita, US$</strong></td>
<td>1929</td>
<td>660</td>
<td>739</td>
<td>873</td>
<td>1107</td>
<td>1524</td>
<td>1982</td>
<td>2853</td>
<td>3606</td>
<td>2647</td>
<td>2807</td>
<td>3042</td>
<td>3027</td>
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<tr>
<td><strong>Inflation (% year end)</strong></td>
<td>0.4</td>
<td>2.9</td>
<td>2.0</td>
<td>8.6</td>
<td>2.0</td>
<td>-0.2</td>
<td>5.4</td>
<td>6.7</td>
<td>5.5</td>
<td>6.7</td>
<td>8.5</td>
<td>4.7</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Investments (% of GDP)</strong></td>
<td>18.2</td>
<td>19.8</td>
<td>21.7</td>
<td>24.7</td>
<td>23.9</td>
<td>29.7</td>
<td>35.9</td>
<td>37.8</td>
<td>40.9</td>
<td>33.8</td>
<td>29.4</td>
<td>27.0</td>
<td>22.5</td>
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<tr>
<td><strong>National budget revenue (% of GDP)</strong></td>
<td>16.5</td>
<td>17.0</td>
<td>18.8</td>
<td>17.8</td>
<td>15.6</td>
<td>15.7</td>
<td>18.0</td>
<td>20.1</td>
<td>20.5</td>
<td>20.9</td>
<td>21.2</td>
<td>22.1</td>
<td>22.4</td>
</tr>
<tr>
<td><strong>including taxes (% of GDP)</strong></td>
<td>14.3</td>
<td>14.6</td>
<td>14.0</td>
<td>14.1</td>
<td>14.3</td>
<td>14.5</td>
<td>16.0</td>
<td>16.8</td>
<td>16.1</td>
<td>16.4</td>
<td>16.7</td>
<td>18.2</td>
<td></td>
</tr>
<tr>
<td><strong>National budget expenditures (% of GDP)</strong></td>
<td>21.1</td>
<td>21.4</td>
<td>19.3</td>
<td>17.3</td>
<td>18.3</td>
<td>20.2</td>
<td>22.3</td>
<td>21.6</td>
<td>28.8</td>
<td>25.8</td>
<td>24.9</td>
<td>24.0</td>
<td></td>
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<tr>
<td><strong>National budget deficit (% of GDP)</strong></td>
<td>-4.1</td>
<td>-2.6</td>
<td>-1.5</td>
<td>-1.7</td>
<td>-2.6</td>
<td>-2.2</td>
<td>-2.2</td>
<td>-1.2</td>
<td>-7.9</td>
<td>-4.6</td>
<td>-2.8</td>
<td>-1.6</td>
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<tr>
<td><strong>National debt (incl. government-guaranteed, % of GDP)</strong></td>
<td>39.4</td>
<td>45.3</td>
<td>46.6</td>
<td>40.9</td>
<td>32.4</td>
<td>24.2</td>
<td>21.1</td>
<td>17.8</td>
<td>16.1</td>
<td>40.2</td>
<td>39.7</td>
<td>41.8</td>
<td>44.9</td>
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<tr>
<td><strong>Export of products and services (growth to previous year, %)</strong></td>
<td>9.9</td>
<td>25.3</td>
<td>25.8</td>
<td>16.4</td>
<td>3.6</td>
<td>18.8</td>
<td>-2.0</td>
<td>5.9</td>
<td>-15.4</td>
<td>-12.2</td>
<td>32.6</td>
<td>8.2</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Import of products and services (growth to previous year, %)</strong></td>
<td>0.5</td>
<td>4.9</td>
<td>12.0</td>
<td>17.8</td>
<td>5.2</td>
<td>21.2</td>
<td>7.7</td>
<td>29.7</td>
<td>19.6</td>
<td>-11.8</td>
<td>2.8</td>
<td>0.3</td>
<td>5.2</td>
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<tr>
<td><strong>Current account (% of GDP)</strong></td>
<td>-14.6</td>
<td>-9.5</td>
<td>-6.2</td>
<td>-6.8</td>
<td>-4.6</td>
<td>-3.9</td>
<td>-1.8</td>
<td>-6.4</td>
<td>-11.8</td>
<td>-15.8</td>
<td>-14.8</td>
<td>-10.9</td>
<td>-10.6</td>
</tr>
<tr>
<td><strong>External debt (% of GDP)</strong></td>
<td>31.4</td>
<td>31.6</td>
<td>29.5</td>
<td>57.8</td>
<td>65.4</td>
<td>72.8</td>
<td>77.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>including national debt (% of GDP)</strong></td>
<td>18.9</td>
<td>15.7</td>
<td>13.6</td>
<td>35.7</td>
<td>34.7</td>
<td>36.4</td>
<td>39.5</td>
<td></td>
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<td></td>
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<tr>
<td><strong>External debt service ratio (% of exports)</strong></td>
<td>9.7</td>
<td>9.7</td>
<td>9.8</td>
<td>15.6</td>
<td>9.7</td>
<td>5.7</td>
<td>3.9</td>
<td>2.9</td>
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<td>5.4</td>
<td>4.7</td>
<td>4.2</td>
<td>9.6</td>
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<tr>
<td><strong>International reserves (months of import)</strong></td>
<td>3.6</td>
<td>3.6</td>
<td>3.7</td>
<td>4.0</td>
<td>3.3</td>
<td>3.4</td>
<td>3.6</td>
<td>4.2</td>
<td>4.6</td>
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<td>4.7</td>
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<td>4.2</td>
</tr>
</tbody>
</table>

* Since 2013 revenues include social contributions