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Report No: PAD884

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF US\$50 MILLION

TO

THE REPUBLIC OF ARMENIA

FOR A

TRADE PROMOTION AND QUALITY INFRASTRUCTURE PROJECT

MAY 15, 2014

**Financial and Private Sector Development Unit  
South Caucasus Country Unit  
Europe and Central Asia Region**

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## **CURRENCY EQUIVALENTS**

(Exchange Rate Effective May 7, 2014)

Currency Unit = Armenian Dram

AMD 413.223 = US\$1

US\$ 1.55567 = SDR 1

## **ARMENIA GOVERNMENT FISCAL YEAR**

January 1 – December 31

## **ABBREVIATIONS AND ACRONYMS**

AFM	Armenia Development Agency
ADS	Armenia Development Strategy
CPS	Country Partnership Strategy
CRM	Customer Relationship Management
DA	Designated Account
DCFTA	Deep and Comprehensive Free Trade Agreement
DLI	Disbursement Linked Indicator
DPO	Development Policy Operation
ECA	Europe and Central Asia
ECU	Eurasian Customs Union
EEP	Eligible Expenditure Program
EIF	Enterprise Incubator Foundation
EU	European Union
FDI	Foreign Direct Investment
FFPMC	Foreign Financing Projects Management Center
FM	Financial Management
FMM	Financial Management Manual
GDP	Gross Domestic Product
GoA	Government of Armenia
GSP	Generalised System of Preferences
IAF	International Accreditation Forum
IBRD	International Bank for Reconstruction and Development
ICT	Information and Communications Technology
IDF	Industrial Development Foundation
IEPI	Investment, Export Promotion and Industrial Development Agency
IFAC	International Federation of Accountants
IFC	International Finance Corporation
ILAC	International Laboratory Accreditation Cooperation
IPF	Investment Project Financing
ISA	International Standards on Auditing
IT	Information Technology
M&E	Monitoring and Evaluation
MLAs	Multi-lateral agreements
MNC	Multi-National Corporation
MoE	Ministry of Economy

MoF	Ministry of Finance
MOU	Memorandum of Understanding
MRAs	Mutual-recognition agreements
NAB	National Accreditation Body
NCFA	National Competitiveness Foundation of Armenia
NIM	National Institute of Metrology
NTO	National Tourism Organization
OM	Operational Manuals
PDO	Project Development Objective
PFM	Public Financial Management
PMU	Project Management Unit
POM	Project Operational Manual
PPPs	Public Private Partnerships
PSC	Project Steering Committee
PTB	Physikalisch-Technische Bundesanstalt (German Metrology Institute)
R&D	Research & Development
RBF	Result Based Financing
SARM	National Institute of Standards
SME DNC	Small and Medium Enterprises Development National Center
SME UCO	SME Invest Universal Credit Organization
TA	Technical Assistance
TOR	Terms of Reference
UNDB	United Nations Development Business

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**ARMENIA**  
**Trade Promotion and Quality Infrastructure Project**

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**PAD DATA SHEET***Armenia**Trade Promotion and Quality Infrastructure (P146994)***PROJECT APPRAISAL DOCUMENT***EUROPE AND CENTRAL ASIA**ECSPF*

Report No.: PAD884

<b>Basic Information</b>			
Project ID P146994	EA Category B - Partial Assessment	Team Leader Feyi Boroffice	
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ]		
	Financial Intermediaries [ ]		
	Series of Projects [ ]		
Project Implementation Start Date 10-Jun-2014	Project Implementation End Date 30-Jun-2020		
Expected Effectiveness Date 01-Dec-2014	Expected Closing Date 30-Jun-2020		
Joint IFC No			
Sector Manager Aurora Ferrari	Sector Director Gerardo M. Corrochano	Country Director Henry G. R. Kerali	Regional Vice President Laura Tuck
Borrower: Ministry of Economy			
Responsible Agency: Ministry of Economy			
Contact: Telephone No.: 374-10-52-61-34	Karen Chshmarityan	Title: Email: kchshmarityan@mineconomy.am	Minister of the Ministry of Economy
<b>Project Financing Data(in US\$ Million)</b>			
<input checked="" type="checkbox"/> Loan	<input type="checkbox"/> Grant	<input type="checkbox"/> Guarantee	
<input type="checkbox"/> Credit	<input type="checkbox"/> IDA Grant	<input type="checkbox"/> Other	
Total Project Cost:	59.5	Total Bank Financing:	50.0
Financing Gap:	0.00		
<b>Financing Source</b>		<b>Amount</b>	
Borrower		9.5	

International Bank for Reconstruction and Development	50.0
Total	59.5

### Expected Disbursements (in US\$ Million)

Fiscal Year	2014	2015	2016	2017	2018	2019	2020		
Annual	1.0	7.0	12.0	12.0	10.0	5.0	3.0		
Cumulative	1.0	8.0	20.0	32.0	42.0	47.0	50.0		

### Proposed Development Objective(s)

The Project Development Objective (PDO) is to strengthen the government's capacity to provide export promotion, investment attraction and quality management services to firms.

### Components

Component Name	Cost (US\$ Millions)
Component 1: Improving the Effectiveness of the Trade promotion and Quality system	10.0
Component 2: Promoting Investment and Exports	29.2
Component 3: Modernizing the National Quality Infrastructure	8.7
Component 4: Project Management and Monitoring and Evaluation	2.0

### Institutional Data

#### Sector Board

Investment Climate Practice

#### Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Industry and trade	Other domestic and international trade	50		
Industry and trade	General industry and trade sector	50		
Total		100		

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

### Themes

Theme (Maximum 5 and total % must equal 100)			
Major theme	Theme	%	
Trade and integration	Export development and competitiveness	50	
Financial and private sector development	Micro, Small and Medium Enterprise support	25	
Financial and private sector development	Other Private Sector Development	25	
Total		100	
Compliance			
Policy			
Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [ X ]	
Does the project require any waivers of Bank policies?	Yes [ ]	No [ X ]	
Have these been approved by Bank management?	Yes [ ]	No [ X ]	
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [ X ]	
Does the project meet the Regional criteria for readiness for implementation?	Yes [ X ]	No [ ]	
Safeguard Policies Triggered by the Project	Yes	No	
Environmental Assessment OP/BP 4.01	X		
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36		X	
Pest Management OP 4.09		X	
Physical Cultural Resources OP/BP 4.11		X	
Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12	X		
Safety of Dams OP/BP 4.37		X	
Projects on International Waterways OP/BP 7.50		X	
Projects in Disputed Areas OP/BP 7.60		X	
Legal Covenants			
Name	Recurrent	Due Date	Frequency
Safeguards	X		Continuous
Description of Covenant			
The Borrower shall carry out the Project in accordance with the Safeguard frameworks and all Safeguard Documents			
Name	Recurrent	Due Date	Frequency
Disbursement Linked Indicators and	X		Continuous



Eligible Expenditure Program			
<b>Description of Covenant</b>			
The Borrower shall provide documentation on: (i) achievement of the agreed activities/targets for the Disbursement Linked Indicators; and (ii) the actual amount of the Eligible Expenditure Program (EEPs) incurred upon validation of the EEPs performed by independent auditors acceptable to the Bank.			
<b>Conditions</b>			
<b>Source Of Fund</b>	<b>Name</b>	<b>Type</b>	
IBRD	Project Operational Manual and Implementation Manuals	Disbursement	
<b>Description of Condition</b>			
The Borrower shall prepare the following acceptable to the Bank and approved by the Ministry of Economy: (a) a Project Operational Manual (POM) for general activities of the Project; (b) a Grant Implementation Manual describing the processes for the implementation of the Exporter Development Grants; and (c) a PPP Implementation Manual describing the process for the implementation of the PPP schemes.			
<b>Team Composition</b>			
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<b>Name</b>	<b>Title</b>	<b>Specialization</b>	<b>Unit</b>
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Robert Hejzak	Consultant		
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Ana Florina Pirlea	Consultant		

**Locations**

<b>Country</b>	<b>First Administrative Division</b>	<b>Location</b>	<b>Planned</b>	<b>Actual</b>	<b>Comments</b>

## I. STRATEGIC CONTEXT

### A. Country Context

**1. Despite a substantive recovery from the global economic crisis, unemployment and poverty in Armenia remain higher than pre-crisis levels.** Prior to the crisis, the Armenian economy grew by about 11 percent per annum between 2000 and 2008, which consistently exceeded the growth of other lower middle income countries. Construction played a dominant role in accelerating economic growth with 25 percent share in GDP<sup>1</sup> supported by diaspora investments through large remittance inflows. The abrupt drop in remittances during the crisis (35 percent decline in 2009) led to a severe slowdown of the economy with the construction industry contracting by more than 40 percent, resulting in the economy shrinking by 14.6 percent in 2009. The economy quickly rebounded from the crisis primarily buoyed by demand for Armenia’s mineral exports and a good agricultural harvest, leading to 2.2 percent GDP growth in 2010, and 7.2 percent growth in 2012. However, unemployment and poverty incidence are at higher levels than before the 2009 economic crisis with unemployment at 18.4 percent in 2011 compared to 16.4 percent in 2008 and a 35 percent poverty rate in 2011 compared to 27.6 percent in 2008. Furthermore, the gap between female and male labor force participation has remained consistently wide over the past decade (56 percent female versus 77 percent male in 2012).

**2. The 2013 Country Economic Memorandum emphasized that Armenia needs a new growth model led by services and manufacturing competing in international markets.** Data indicate that the country’s value added comes primarily from the services sectors (46 percent of Gross Value added in 2011). Opportunities also exist to grow the manufacturing base, particularly in niche goods that can be priced to overcome the logistics impediments Armenia faces.

**3. Over the past few years, the Armenian government has developed strategies to support the manufacturing sector and build upon its growing services sector.** In 2010, the government developed an “Export-Led Industrial Policy Framework”, which led to the development of a set of strategies aimed at increasing international competitiveness of industries with export potential. The recently completed Armenia Development Strategy (ADS) for 2014-2025 identifies the government’s priority to increase employment opportunities by facilitating the creation of high value added jobs with the long-term strategic objective of transitioning from a resource-based to a knowledge-based economy.

**4. Armenia decided to join the Eurasian Customs Union (ECU) in September 2013.** The Deep and Comprehensive Free Trade Agreement (DCFTA) with the European Union was subsequently discontinued, although Armenia had concluded negotiations with the EU in July 2013. While Russia remains Armenia’s major trading partner (accounting for 21.3 percent of total exports in 2012) and the largest investor (37.7 percent in 2010), the EU-15 is the largest trading block with over 40 percent of exports and has been growing in importance over the last

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<sup>1</sup> Country Partnership Strategy for the Republic of Armenia FY2014-FY2017, The World Bank Group

decade<sup>2</sup>. It is expected that exports and investments from the ECU will significantly increase.

## **B. Sectoral and Institutional Context**

### *Trade Competitiveness Assessment*

**5. Armenia has a low export base primarily in commodities and the sophistication of the country's export products has declined significantly over the years.** The three sectors that dominate the goods export basket in 2012, namely foodstuffs, metals, and minerals, are the same sectors that dominated the export basket a decade ago. Armenia went from having the most sophisticated export basket in the South Caucasus to the least sophisticated over the past decade as the technological content decreased. For a small country like Armenia that cannot compete on scale and must compete on quality, this is an ominous trend. Left unchanged, the structure of Armenia's export basket will do little to mitigate Armenia's vulnerability to global competition and will confine the country to a lower growth trajectory. Upgrading of Armenia's export basket will be limited without a significant push towards its diversification by supporting companies in non-dominant sectors that will help improve their potential to export by enhancing the complexity and quality of their products.

**6. The government developed the Export-Led Industrial policy to facilitate the improvement of the global competitiveness of Armenian firms.** The government subsequently established industry-specific sector boards as a platform for Public-Private-Dialogue for priority sectors determined based on: (i) their potential for export diversification; and (ii) opportunities for cluster development.<sup>3</sup> The sector boards comprised key stakeholders including businesses, industry unions, professional associations, educational and research organizations. From 2012-13, the sector boards prepared sectoral assessments with detailed action plans for a number of the priority industries<sup>4</sup>. The sectoral assessments highlighted a number of sector specific challenges and revealed regulatory reforms and investments in public goods and services that would strengthen industry clusters and improve the export potential of firms (see Annex 8 for more details on the sector specific action plans). The major areas of support identified include: (i) promotion of sales and market research on foreign markets; (ii) development and strengthening of industry clusters; (iii) industry-academia collaboration; and (iv) modernization of quality infrastructure (laboratories, standards).

**7. While foreign ownership is a key driver of export growth, the quantum of Foreign Direct Investment (FDI) arriving into Armenia has been stagnating in recent years. Russia**

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<sup>2</sup> Armenia has benefited from the general arrangement of the EU Generalised System of Preferences (GSP) since 2006 and GSP+ since 2008. Its utilisation rate is very high at about 90%, however its main exports are base metals (78%) and textiles (18%).

<sup>3</sup> Priority industries were divided into: a) those with relatively high export volumes over the past few years and with the potential to scale up (diamond cutting, gold jewelry, watch making, brandy and textile), b) industries that had experienced high growth over the past few years with potential for accelerated growth (pharmaceuticals, preserve production, wine, mineral water and juice); and c) industries identified as new drivers for growth (precision engineering).

<sup>4</sup> Funding for the preparation of the sectoral strategies was provided by the Export-led Industrial Development Strategy Implementation Support TA (P145530) funded by the World Bank Multi Donor Fund for Trade and Development

and France are the largest sources of FDI for Armenia accounting, respectively, for 44 percent and 25 percent of the country's FDI inflows between 2009 and 2010. Telecommunications, mining and real estate are the major sectors to attract FDI. Since the financial crisis, the inflow of FDI to the South-Caucasus region increased by 26 percent from 2009-2011, however, Armenia showed a steady decrease from US\$778 million in 2009 to US\$489 million in 2012 as investments in financial services and electricity declined. FDI inflows are much lower than in neighboring Georgia (33 percent less for the period 2009-11, 45 percent less in 2012) and significantly less than in all the new EU member states.

**8. Presently, Armenia receives a preponderance of market-seeking FDI with minimal impact on exports and has only been able to attract efficiency-seeking FDI in a few sectors, most notably Information and Communications Technology (ICT).** The FDI entering Armenia over the past five years has mostly been market-seeking (telecommunication, real estate and financial services and electricity) which has limited impact on the country's export base. The resource-seeking FDI (mining) is directly related to exports but leaves the country vulnerable to commodity price swings. In contrast, efficiency-seeking investors, such as the high tech multinationals that conduct R&D in the country are primarily interested in leveraging factor market efficiencies with a view to export. An increase in efficiency-seeking FDI is the key to sustainable FDI expansion in Armenia.

**9. Discussions with existing high-tech multinationals revealed a pattern of phased commitment in Armenia:** (i) starting with limited engagements, such as outsourcing projects to Armenian Information Technology (IT) firms and/or university scientists; then (ii) increasing the level of engagement through joint initiatives with the government, academia and donors (for example laboratories in universities to improve the quality of skills and research, and innovation centers to support IT start-ups); and then finally (iii) making the commitment to develop a Research and Development (R&D) center and hire staff in the country. By supporting these joint initiatives, the government has spearheaded the growth of the IT sector and strengthened linkages between domestic IT firms and the global IT multinationals.

**10. A simple and transparent legislative framework is an important prerequisite for attracting investment.** The Government of Armenia (GoA) has already commenced a review of the Law on Foreign Investments, enacted in 1994 and its subordinate laws and regulations. Armenia has bilateral agreements for investment and mutual protection with 39 countries and is negotiating with more than twenty other countries. Notwithstanding the progress made so far, there needs to be some consistency between Armenia's international obligations towards investors and its domestic legislation. Specific areas that should be re-evaluated include: (i) addressing the informal practices such as preferential treatment based on personal connections and rent-seeking; and (ii) the provisions referring to the general principles of investment protection, which lack specificity and implementing regulations. Furthermore, the government has indicated that it wishes to introduce a larger range of incentives for the purposes of attracting investment.

**11. Armenia is a small and landlocked economy with significant connectivity constraints, which would benefit from a clear value proposition for receiving efficiency-**

**seeking FDI.** The government is in the process of conducting an Investment Reform Map process with the support of the World Bank Group<sup>5</sup>. Understanding the quantity, quality and type of FDI that Armenia attracts, as well as its economy-wide and sector value propositions, is an essential starting point to improving its competitiveness. As a country in transition, Armenia seeks to reform and align its investment policy with its development objectives so as to leverage FDI for development by increasing the integration of the domestic private sector into the global economy.

**12. To succeed in facilitating the increase in FDI and exports, Armenia will need a strong institutional framework.** The enterprise support agencies that were identified as the implementation agencies for the Export Led Industrial Policy include: (i) Armenia Development Agency (ADA), which is the government entity formally charged with mandate to execute investment attraction and export promotion activities; (ii) Industrial Development Fund (IDF), which was set up to fund the Export Led Industrial Strategy; (iii) Small and Medium Enterprises Development National Center (SME DNC) and (iv) SME Invest Universal Credit Organization (SME UCO), which were set up to support SMEs. Furthermore, the Enterprise Incubator Foundation (EIF) was established to support the ICT industry, while the National Competitiveness Foundation of Armenia (NCFA) was created to coordinate and support the government's strategic initiatives to accelerate Armenia's global competitiveness.

**13. There is significant overlap between ADA and IDF and the overall impact of both agencies on export and FDI growth has been limited.** ADA and IDF's responsibilities in the area of Export promotion are duplicative, leading to inefficiencies. An institutional assessment of ADA found that it was underperforming, predominantly due to lack of funding and its status as a public closed joint-stock company limits its independence and revenue generating opportunities. With approximately US\$300,000 allocated annually to ADA between 2011 and 2013, the financial resources cover only its personnel and operating costs, with little available for proactive investment outreach, image building and expanding export promotion activities. The agency has relied mainly on donor funding for programming and that has led to opportunistic activities with minimal impact. To effectively support increasing the export capacity of firms, the focus will need to shift towards supporting enterprise competitiveness and export readiness. Investment promotion efforts would also benefit from: (i) supporting the development of an image building and marketing campaign to enhance the global view of Armenia and inform potential investors of the country's success stories; and (ii) developing the capabilities to fully support existing investors given that in Armenia, as in many countries, over 50 percent of new FDI comes from existing investors.

**14. In February 2014, the government made some key decisions to strengthen the enterprise support structure.** In particular, the government submitted a letter to the World Bank (see Annex 1) on its plans to: (i) merge ADA and IDF into the Investment, Export Promotion and Industrial Development Agency (IEPI); and (ii) establish the National Tourism Organization as the sole organization focusing on tourism. The plan is for IEPI to become a

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<sup>5</sup> The preparation budget for this loan and the Multi-Donor Trust fund for Trade and Development financed the initial review of the Investment law and the development of the Investment Reform overview. The proposed IFC Armenia Investment Climate Advisory project (FY2015-2018) will support the development of the Investment Reform Map and amendments to the Investment Law.

foundation with more operational independence and with the ability to develop the entrepreneurial culture required to meet the needs of Armenian businesses and foreign investors. As a foundation the agency will: (i) have a board that is comprised of a majority private sector membership and; (ii) raise funds from various sources, including donations, grants, contributions from state budget, and income generating activities.

### *Quality Infrastructure assessment*

**15. Armenia’s national quality infrastructure suffers from significant weaknesses that hinder technology upgrading and undermine the competitiveness of its exports.** Lack of modern quality infrastructure has severely constrained the ability of Armenian firms to move up the value chain or to find export markets. Most of Armenia’s potential export destinations, including the EU, the USA, and Russia, often require higher certification standards than those applied domestically. As identified in the report on Quality Infrastructure<sup>6</sup>, less than half of Armenia’s domestic enterprises have obtained international quality certifications. Furthermore, staffing skills would require adequate training international quality management.

**16. Significant reforms have taken place in the National Quality Infrastructure in recent years, laying the foundation for improved service delivery.** Since the adoption of the “Strategy for the Reform of the Republic of Armenia’s Quality Infrastructure” (2010-2020) in 2010, several major reforms have taken place; most notably new laws on metrology, standardization, accreditation, and certification, in line with international best practice, were developed and adopted in 2012. One of the most important reforms implemented as a result of the new laws was the transformation of the accreditation function from a department within Ministry of Economy (MoE) into an independent National Accreditation Body (NAB) established in 2013 with an accreditation council represented by public and private sector stakeholders. The government has confirmed its intention to develop a new organizational structure and staffing plan for the National Institute of Metrology (NIM) and NAB, in line with international best practice (see Annex 1).

### **C. Higher Level Objectives to which the Project Contributes**

**17. The Project is consistent with the World Bank Group’s twin goals of ending extreme poverty and promoting shared prosperity.** The ADS, which aims to reduce poverty from 35 percent in 2011 to 13 percent in 2025, identified job creation as one of the key priorities<sup>7</sup>. The project is expected to contribute to generating private sector-led growth and job creation by promoting exports and investments, and facilitate an increase in efficiency-seeking FDI. The proposed project is also in line with Cluster 1 of the Country Partnership Strategy (CPS) for FY14-17: “Supporting Competitiveness and Job Creation” and supports the CPS objective to facilitate investment and the creation of new firms and jobs, which in turn will increase economic opportunities and foster income growth of the bottom 40 percent of the population. In particular, the project will contribute towards private sector-led growth and job creation by supporting promotion of exports and facilitating an increase in efficiency-seeking FDI.

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<sup>6</sup> Upgrading the National Quality Infrastructure in the Republic of Armenia, World Bank 2011.

<sup>7</sup> The other priorities include: developing human capital; strengthening the social protection system; and modernizing public administration and governance.

**18. The Project builds on previous and ongoing projects financed by the World Bank.** This includes the First Development Policy Operation (DPO), approved in November 2013. The DPO is targeting several areas that aim at improving the enabling environment for investment and exports by: (i) streamlining inspections, which will reduce the burden of running a business and rent-seeking opportunities; (ii) enhancing access to credit through improved credit reporting, collateral regime, and debt work-out and bankruptcy procedures, which will alleviate the biggest constraint on business expansion identified in SME surveys; (iii) promoting industrial development and exports through increasing the efficiency and transparency of customs operations, which will enhance the competitiveness of Armenian products and promote an expansion of the production of tradables with a high elasticity of employment; and (iv) enhancing competition through liberalization of the aviation sector, which will improve connectivity and promote the flow of people and ideas, as well as reduce the costs of trade. The project builds upon this foundation by targeting the needed institutional strengthening and investments to support increasing exports and FDI and improvement in quality of domestically produced products and services. The project has laid the groundwork for the technical assistance to be provided by the International Finance Corporation (IFC) in supporting the government in its investment policy reforms. Furthermore the project will benefit from IFCs' business environment programs in areas such as licensing and inspections.

## **II. PROJECT DEVELOPMENT OBJECTIVE**

### **A. PDO**

**19.** The Project Development Objective (PDO) is to strengthen the Borrower's capacity to provide export promotion, investment attraction and quality management services to firms.

### **B. Project Beneficiaries**

**20.** The Project's direct beneficiaries include both existing and potential exporters, who will benefit from improved service delivery under a more efficient trade promotion and quality system. The Project beneficiaries will also include foreign-owned firms who exist and are going to invest in Armenia as well as local enterprises who will receive positive spillover effects from inward FDI. Furthermore, the Project will benefit universities, research institutions and enterprises by promoting industry-academia collaboration.

### **C. PDO Level Results Indicators**

**21.** The results of the proposed project will be evaluated as follows:

- i. Number of new customers for exporters generated through the foreign representative offices;
- ii. Number of cluster development and research and skills development Public Private Partnerships (PPPs) developed;
- iii. Number of successful investments facilitated by IEPI;
- iv. Number of industrial laboratories of the NIM accredited by an accreditation organization that is a signatory to an Multilateral Agreement (MLA) or Mutual Recognition agreement



(MRA) from an international accreditation organization such as International Laboratory Accreditation Cooperation (ILAC) or International Accreditation Forum (IAF); and

- v. NAB becomes a signatory to a MLA or MRA with an international accreditation organization such as ILAC or IAF.

### III. PROJECT DESCRIPTION

#### A. Project Components

**22. The project is designed to provide adequate incentives to ensure improved effectiveness of the government in delivering trade promotion and quality infrastructure services to firms.** The Project is comprised of four components: (i) Component 1: Improving the effectiveness of the trade promotion and quality system of the country (results-based financing - RBF), (ii) Component 2: Promoting investment and exports, (iii) Component 3: Modernizing the national quality infrastructure, and (iv) Component 4: Project management and monitoring and evaluation. The project is designed with a results-focused component (Component 1) to be complemented by the investments financed through Components 2 and 3 of the project and other sources including the government and donor funds outside the project. By combining the RBF component with the traditional investment components, the project is designed to ensure the critical institutional strengthening needed to maximize the effectiveness of the investments takes place.

**Component 1: Improving the Effectiveness of the Trade Promotion and Quality System (US\$10.0 million results-based component to be disbursed against the achievement of Disbursement Linked Indicators)**

**23. The objective of this Component is to promote reforms aimed at improving the trade promotion and quality infrastructure system.** This results-based component will disburse loan funds to the government for agreed-upon actions, outputs and outcomes (“Disbursement-Linked Indicators” or DLIs) that result in improvements to the trade promotion and quality system. The government will receive disbursements based on established amounts allocated to the achieved DLIs to the extent that there are sufficient eligible expenditures incurred by the government (defined as the Eligible Expenditure Programs – EEPs).

**24. This component will focus on the achievement of the following results:**

- i. Strengthening of the national investment and export promotion services;*
- ii. Strengthening of the national metrology services; and*
- iii. Strengthening of the national accreditation services.*

**25. The component will support the government’s efforts to improve service delivery in the trade promotion and quality system by rewarding results achieved in:** (i) streamlining and strengthening the institutional framework for trade promotion and quality infrastructure by merging duplicative agencies; (ii) creating organizational structures that are in line with international best practice; (iii) improving the monitoring and evaluation process of the agencies by incorporating annual reviews and action plans and independent evaluations; and (iv) ensuring

adequate budget from the state for the agencies to perform the activities outlined in their action plans.

**26. Sub-Component 1.1 Strengthening of the national investment and export promotion services:** The objective of this component is to support activities that will create the enabling environment for investment and exports and ensure the development of effective investment and export promotion services that can meet the needs of Armenian firms and FDI. This component will disburse according to the achievement of the following results: (i) development and implementation of an investment reform map to attract investment to the country; (ii) the merger of ADA and IDF into the new Investment, Export Promotion and Industrial Development Agency (IEPI); (iii) establishment of the new National Tourism Organization (NTO); (iv) staffing the new IEPI with an organizational structure in line with international best practice; (v) improving the monitoring and evaluation process of the IEPI by incorporating annual reviews and action plans and independent evaluations; and (vi) ensuring adequate budget from the state for the IEPI to perform the activities outlined in its action plans.

**27. Sub-Component 1.2 Strengthening of the national metrology services.** The objective of this component is to reorganize NIM into a world class institution that can provide metrology services operating under internationally-recognized quality management systems. This component will disburse according to the achievement of the following results: (i) staffing the organization with staff with the required skills set; (ii) providing the necessary State budget for the staff and activities required to run internationally accredited metrology laboratories; (iii) improving the monitoring and evaluation process of the NIM by incorporating annual reviews and action plans and independent evaluations; and (iv) achieving international accreditation for the laboratories.

**28. Sub-Component 1.3 Strengthening of the national accreditation services:** The objective of this component is to strengthen the capacity of the new NAB to become an internationally-recognized accreditation institution. This component will disburse according to the achievement of the following results: (i) staffing the organization with the required skills set; (ii) providing the necessary budget for the staff and activities required to achieve international recognition; (iii) improving the monitoring and evaluation process of the NAB by incorporating annual reviews and action plans and independent evaluations; and (iv) achieving international recognition by an international accreditation organizations ILAC or IAF.

**Table 1: Summary of DLIs**

Disbursement- Linked Indicators	Expected Date of Achievement					
	June 2015	June 2016	June 2017	June 2018	June 2019	June 2020
<i>Sub- Component 1.1 Strengthening of the national investment and export promotion services</i>						
<b>DLI 1:</b> Government Decree on adoption of Investment Reform Map issued	X					
<b>DLI 2:</b> Merger of ADA and IDF into the IEPI	X					
<b>DLI 3:</b> Government decree issued to establish NTO	X					
<b>DLI 4:</b> IEPI staffed with organizational structure in line with international best practice	X	X	X	X	X	X
<b>DLI 5:</b> Adequate budget for IEPI included in State budget	X	X	X	X	X	X

Disbursement- Linked Indicators	Expected Date of Achievement					
	June 2015	June 2016	June 2017	June 2018	June 2019	June 2020
<b>DLI 6:</b> Monitoring and Evaluation conducted	X	X	X	X	X	X
<i>Sub- Component 1.2 Strengthening of the national metrology services</i>						
<b>DLI 7:</b> NIM staffed with organizational structure in line with international best practice	X	X	X	X	X	X
<b>DLI 8:</b> Adequate budget for NIM included in State budget	X	X	X	X	X	X
<b>DLI 9:</b> Monitoring and Evaluation conducted	X	X	X	X	X	X
<b>DLI 10:</b> International Accreditation attained for at least 2 metrology laboratories					X	
<i>Sub- Component 1.3 Strengthening of the national accreditation services</i>						
<b>DLI 11:</b> NAB staffed with organizational structure in line with international best practice	X	X	X	X	X	X
<b>DLI 12:</b> Adequate budget for NAB included in State budget	X	X	X	X	X	X
<b>DLI 13:</b> Monitoring and Evaluation conducted	X	X	X	X	X	X
<b>DLI 14:</b> NAB attains MLA or MRA in testing laboratories according to ISO/IEC 17025					X	

## Component 2 – Promoting Investment and Exports (US\$29.2 million)

**29. The objective of this component is to strengthen the capacity of local exporters to compete in foreign markets, facilitate cluster development, and attract efficiency seeking FDI.** Activities to be financed include the following sub-components:

**30. Sub-component 2.1: Support services provided by the Investment, Export Promotion and Industrial Development Agency (IEPI) (US\$6.3 million).** This component will finance the creation of new investment and export promotion programs to be implemented by the new IEPI, to build the foundation to promote both inward FDI and exports. A range of new programs will be financed under this sub-component, including: (i) Establishing foreign representatives in key export and investment markets (up to 6 markets envisioned); (ii) Developing new export promotion services; (iii) Image building and investment outreach services for new and existing investors; iv) Building the IT infrastructure for the agency; and (v) Training and capacity building of staff including hiring of an international expert to serve as resident advisor.

**31. Sub-component 2.2: Exporter Development Grants (\$3.6 million).** The objective of this subcomponent is to co-finance the acquisition of knowledge and marketing services to improve the products, services and processes of SMEs with export potential and increase the awareness of their products and services in foreign markets. This sub-component will be implemented by the new IEPI. The grants will fund SMEs export related knowledge and marketing activities which could include: (i) consulting services to help the firm upgrade its managerial and technical capabilities; (ii) attaining the requirements for the acquisition of

international certifications required for exports; (iii) development of market entry/foreign expansion strategies; (iv) development and execution of marketing plans, including attendance at trade shows and exhibits; (v) customized company-specific foreign market research; (vi) development of new products and services for export, and other relevant export promotion services. The project will contribute up to 70 percent of a proposed set of activities proposed by the beneficiaries while the beneficiaries will contribute a minimum of 30 percent in cash and/or in kind. The project will also fund the grant administration expenses including the hiring of a Grant manager and an independent selection committee.

**32. Sub-component 2.3: Public Private Partnerships (PPPs) to promote research, skills and cluster Development (US\$19.3 million).** The objective of this sub-component is to: (i) support the upgrading of domestic industries; (ii) strengthen the relationships with existing efficiency-seeking high-value added FDI and enhance the potential for new FDI; and (iii) facilitate industry-academia collaboration. EIF will be the implementing agency for the proposals related to IT and Engineering, while IEPI will be the implementing agency for the other sectors. The sub-component will include two instruments: (i) *Cluster development PPPs* will strengthen industry clusters, and (ii) *Research and skills development PPPs* will be targeted at encouraging efficiency-seeking FDI (primarily in high tech) to strengthen their level of engagement in the country and facilitate skills development by funding joint projects between multinationals and academia. The project will also fund PPP administration expenses, including the hiring of a PPP manager, PPP expert and an independent selection committee. While not a specific requirement, one of the guiding principles of the grants and PPPs will be to encourage companies and industries with significant female workforce participation to apply. There will be targeted outreach towards: (i) the apparel and textile sector, whose female workforce reaches 90 percent; and (ii) the Food and Beverage processing industry, given its strong linkages with the agriculture sector which in which 44 percent of women in the workforce are employed.

### **Component 3: Modernizing the National Quality Infrastructure (US\$8.7 million)**

**33. The objective of this component is to modernize metrological, accreditation and standards services in order to provide relevant quality assurance services to industry.** This sub-component will finance infrastructure investments, capacity building, and IT systems infrastructure.

**34. Sub-component 3.1: Renovation of metrology building and laboratories, purchase of equipment and capacity building for NIM staff.** The objective of this sub-component is the development of industrial metrology laboratories that are in line with international standards. This sub-component will finance: (i) the renovation of a building to house the seven key industrial metrology laboratories identified in the national metrology strategy; (ii) procurement of equipment and furniture for the laboratories built under the project; and (iii) capacity building for the effective and efficient operations of the laboratories including the hiring of an international resident advisor to work with the staff, and a firm to support the implementation of a quality management system (QMS) in accordance with ISO 17025 in the industrial metrology laboratories.

**35. Sub-component 3.2: Refurbishment of NAB offices and facilitating service delivery improvements.** The objective of this sub-component is to support the NAB to achieve its goal

of becoming an internationally recognized body by obtaining MLAs and/or MRAs with the international accreditation bodies. This sub-component will finance: (i) the refurbishment of the NAB offices including the procurement of furniture, (ii) capacity building of NAB staff, including the hiring of an international resident advisor to support skills-building of staff and deliver the training required for the effective and efficient operations of the NAB, and (iii) the development of an on-line application system and database.

**36. Sub-component 3.3: Development of a database for the catalogue of standards for the National Institute of Standards (SARM).** The objective of this sub-component is to support the SARM's efforts to build a modern IT infrastructure to improve the efficiency of its operations. This sub-component will finance an electronic library and database of standards including the procurement of the relevant international standards documents and the procurement of IT equipment.

#### **Component 4: Project Management and Monitoring and Evaluation (US\$2.0 million)**

**37. The objective of this component is to finance project implementation and monitoring.** Given the various entities involved in this Project, the MoE will oversee the implementation of the project through a Project Management Unit (PMU) within the Ministry. The Foreign Financing Project Management Center (FFPMC) will be responsible for the fiduciary aspects of the project activities. This component will finance: (i) consultants employed as part of the PMU including the Project Manager and other required support consultant staff including a translator, a Social and Environmental Safeguards specialist and a Monitoring and Evaluation specialist; (ii) required goods and services to support the functioning of the PMU as needed, including office equipment, (iii) fiduciary staff of FFPMC, including a procurement specialist and Financial Management (FM) specialist, (iv) the incremental operating costs for the MoE PMU team and implementing agencies including FFPMC, IEPI and EIF; and (v) all project related audits.

### **B. Project Financing**

#### **Lending Instrument**

**38. The proposed Investment Project Financing (IPF) will entail the use of IBRD funds, with the Government designated as the Borrower.** The IPF will be implemented over a five year period. Component 1 of the project includes a results-based approach with DLIs linked to measurable results and disbursements to be made against EEPs. This design was chosen to introduce the results based framework to the MoE while still providing the traditional investment lending.

#### **Project Cost and Financing**

**39. The total Project cost is US\$59.5 million with US\$50 million financed by IBRD and US\$9.5 million which represents taxes financed by the Government as outlined in Table 2.**

**Table 2: Project Components and costs (US\$ millions)**

<b>Project Components</b>	<b>Project Cost</b>	<b>IBRD Financing</b>	<b>Government Financing</b>	<b>Percent of T Total Financing</b>
1. Improving the Effectiveness of the Trade Promotion and Quality System	10.00	10.00		16.8
2. Promoting Investment and Exports	29.2	29.2		49.1
3. Modernizing the National Quality Infrastructure	8.7	8.7		14.5
4. Project Management and Monitoring and Evaluation	2.0	2.0		3.4
Taxes	9.5		9.5	16.0
Front-end Fee	0.1	0.1		0.2
Total Project Costs	59.5	50.00	9.5	100.0

### **C. Lessons Learned and Reflected in the Project Design**

**40. Strong political commitment and ownership are critical for steering reforms successfully.** Restructuring the trade promotion and quality system requires challenging long-held expectations and vested interests over time. The proposed Project and the overall restructuring program will require commitment and ownership from the MoE and other stakeholders. The adoption of a results based component will support the government in developing a performance based management system, provide incentives for increased accountability, and help consolidate the monitoring, evaluation and reporting of important results.

**41. Stakeholder input is crucial to developing a successful project.** The design of the project is based on intensive stakeholder consultations and a survey of firms in the eleven priority industries. Focus groups were held with the food processing, engineering, pharmaceuticals, ICT and jewelry, watches and diamonds in September 2013 and follow up consultations on specific aspects of the project design were held in November 2013 and February 2014. Academia was also extensively consulted on aspects of project design related to industry-academic collaboration.

**42. Previous projects in the country provide several lessons related to: (i) implementation of PPP schemes, (ii) handling multiple implementation agencies and (iii) fiduciary arrangements.** Lessons in all these areas are incorporated in the design of the project, and will be reflected in the implementation.

**43. The proposed Project builds on the experiences and lessons from recent and current World Bank investment and technical assistance operations within and outside the region.**

- For Component 1 on *Improving the Effectiveness of the Trade Promotion and Quality System* there were several lessons drawn from a review of RBF projects. Results-based approaches demand that protocols to determine the achievement of DLIs need to be clearly

established, agreed and endorsed upfront to ensure transparency in their measurement and avoid diverging interpretations during their measurement. Furthermore, public sector reform projects supported by the World Bank, including public sector reform grants, served to inform the results based design of Component 1.

- For Component 2 on *Promoting Investment and Exports*, which drew lessons from similar projects outside the Europe and Central Asia (ECA) region, the importance of developing public sector capacity was highlighted. The investment and export support services were designed in line with international best practices. Studies confirm that foreign office representation has a positive impact on exports and validate the fact that successful export promotion agencies support the entire export process<sup>8</sup>. As noted in the World Bank Global Investment Promotion Best Practices Report (2012), solid IT infrastructure including a good website and a Customer Relationship Management (CRM) system to manage inquiry-handling are key promotional and facilitation tools. For the matching grants lessons, were drawn from recent projects and technical assistance in FYR Macedonia, Croatia, Serbia and Bulgaria. Some key lessons from these operations emphasize the importance of private sector participation, management capability, good governance, and cost-effective design and delivery. For the PPP schemes, projects in Mozambique and Gambia emphasized the effectiveness of using the PPPs to address sector-specific constraints and the importance of extensive consultations with the private sector to ensure buy-in and proper project design.
- For Component 3 on *Modernizing the National Quality Infrastructure* lessons from similar projects, in particular the Moldova Competitiveness Enhancement Project, include ensuring the involvement of relevant technical experts from project inception and along each stage of the project, especially for complex subjects.

#### IV. IMPLEMENTATION

##### A. Institutional and Implementation Arrangements

**44. The MoE will be responsible for overall coordination of the project.** High-level management of the project will be carried out by a Project Steering Committee (PSC), chaired by the Minister of Economy and with representation of several key participating institutions: the Ministry of Finance (MoF), the FPPMC, and the project implementation agencies (IEPI, EIF, NIM, NAB and SARM), and relevant technical departments in the MoE (Investment Policy Department, Industrial Policy Department, IT and Innovation Policy department, Quality Infrastructure and Technical Regulation Department and Financial and Budgeting Department).

**45. The MoE will establish a Project Management Unit (PMU) within the ministry to coordinate project implementation, and report to the World Bank and the PSC on project implementation.** The PMU will include a Project Manager, Monitoring and Evaluation (M&E) specialist, an Environment and Social Safeguards Specialist, IT Expert, Engineer and Translator. The PMU will provide for overall management and monitoring and evaluation of the project. Each implementing agency (IEPI, EIF, NIM, NAB and SARM) will create an internal working

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<sup>8</sup> Information barriers, export promotion institutions, and the extensive margin of trade, Volpe et al, February 2010; “Survey of the Literature on Successful Strategies and Practices for Export Promotion by Developing Countries”, Belloc and Maio, June 2011.

group that will coordinate the implementation of its project activities and report on progress of the project implementation to the Project Manager.

**46. FFPMC will be responsible for the implementation of the fiduciary aspects of the project.** This includes procurement and financial management (FM) functions (planning and budgeting<sup>9</sup>, accounting, financial reporting, external auditing, funds flow, and internal controls).

**47. The components of the project will be implemented as follows:**

- **Component 1:** The PMU at MoE will be responsible for reporting the DLIs by providing documentation of the achievement of the DLIs and the actual amount of the EEPs to the World Bank and copying FFPMC. Disbursements will be conditioned on meeting DLIs and the Bank will reimburse the actually incurred eligible expenditures, after those amounts are validated by an independent auditor acceptable to the Bank. The PMU will liaise with the implementing agencies to obtain information on the achievement of the DLIs and with the Department of Finance and Budgeting at MoE to obtain the actual amount of the EEPs. The EEPs consist solely of salaries and therefore have no procurement or safeguard s requirements.
- **Component 2:** The new IEPI will be responsible for sub-component 2.1 (Services to Investors and Exporters), and sub-component 2.2 (Exporter Development Grants). A Grant implementation unit will be set up within IEPI to manage the exporter development grants; and a selection committee of private sector participants will be identified to oversee the selection process.

EIF will be responsible for the PPPs under sub-component 2.3 for approved proposals from the IT and engineering industry while IEPI will be responsible for approved proposals from the other sectors. Two PPP managers (one based in EIF and another based in IEPI) will be hired to manage the PPPs.

Given the integral nature of IEPI to this component, the establishment of IEPI, including the hiring of key staff of the agency (Executive Director, Deputy Directors) is a disbursement condition for component 2. The draft implementation manuals for the exporter development grants (under Sub-Component 2.2) and PPPs for increasing investment and export (under Sub-Component 2.3) describing the operations, implementation arrangements, fund flows and controls has been developed. The approval of the final implementation manuals, acceptable to the Bank by the MoE is a disbursement condition for Sub-Component 2.2 and 2.3.

- **Component 3:** The PMU at MoE will be responsible for the implementation of this component. The PMU will work with the representatives of the NIM, NAB and SARM to develop the ToRs and other technical inputs required for the implementation of the component.
- **Component 4:** The PMU at MoE will be responsible for the implementation of this component.

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<sup>9</sup> FFPMC will be responsible for the planning and budgeting of the Component 2, 3 and 4 under the Project, while the responsibility of the planning, budgeting and reporting under Component 1 will be on the MOE.



## B. Results Monitoring and Evaluation

48. **The Project includes a robust M&E framework to enable decision makers to track performance, adjust implementation as needed, and demonstrate the impact of activities financed.** The PDO level, intermediate results indicators, and DLIs will be monitored through regular data collection process; baseline and follow-up surveys; and reports prepared by the MoE, and the stakeholder agencies. As indicated in the Results Framework, the project will collect gender disaggregated data for indicators as relevant.

49. **An M&E specialist within the PMU will have primary responsibility for establishing and managing the M&E system including data collection, compilation and reporting from various agencies and preparation of M&E reports for the project.** The M&E specialist will coordinate closely with the Project Manager on the reporting for monitoring of the PDO, DLIs and other project indicators. Other staff of the PMU, MoE and other implementing agencies will be trained in the project M&E program as needed.

50. **The PMU management will carry out its own assessment at various stages of the project implementation, and consolidate the findings in annual reports.** A comprehensive evaluation report will be provided by the PMU after the second year of the project and at project completion. The PMU will also organize periodic workshops inviting key project stakeholders to discuss and consolidate their views and findings for the preparation of annual reports and the final evaluation report.

## C. Sustainability

51. **The potential sustainability of the project activities beyond its implementation is high given the strong level of government's commitment.** The government considers the project activities of significant importance for the achievement of its growth oriented policies in line with the ADS 2025. The government has committed itself to a significant array of programs aimed at making exporters more competitive in international markets. The impact of the support provided to government agencies is expected to continue well beyond the life of the project. Furthermore, the proposed project would also provide structure and incentives for greater participation of the private sector and other relevant stakeholders during project implementation and after its closure through their prolonged involvement in the quality management process. In particular, by working with government authorities, enterprises and entrepreneurs, including women, to encourage stakeholder consultation and participation throughout the project, the project hopes to promote greater inclusion, enhanced social accountability and governance and better development outcomes in the business sector.

## V. KEY RISKS AND MITIGATION MEASURES

### A. Risk Ratings Summary Table

<b>Risk Category</b>	<b>Rating</b>
<b>Stakeholder Risk</b>	Moderate
<b>Implementing Agency Risk</b>	
- Capacity	Substantial

- Governance	Moderate
<b>Project Risk</b>	
- Design	Substantial
- Social and Environmental	Low
- Program and Donor	Low
- Delivery Monitoring and Sustainability	Moderate
<b>Overall Implementation Risk</b>	Substantial

## B. Overall Risk Rating Explanation

**52. The overall implementation risk for the Project is assessed as substantial.** Key risks pertain primarily to the innovativeness of the project and the complexity of the project implementation arrangements.

**53. The government has shown significant commitment to project implementation.** While the potential for external interference to delay project implementation remains, adequate mitigation measures have been incorporated into the project. The government has confirmed its intention to proceed with the major restructuring of the enterprise support and quality infrastructure agencies by loan effectiveness (see Annex 1). Furthermore, the results based component signals the government's willingness to be held accountable (results will be published on the government website) for meeting agreed targets. An ongoing World Bank-financed project for Disease Prevention and Control containing a performance based component provides the GoA some familiarity with results based financing.

**54. The coordination role of the MoE reduces the potential for implementation delays.** The PMU within the MoE will be responsible for coordinating all the implementing agencies.

**55. The presence of resident advisors is expected to mitigate potential procurement delays, particularly for PPP and metrology aspects, which tend to entail complex procurement.** The international resident advisors and PPP expert will work closely with the implementing agencies and the PMU to facilitate the procurement process.

**56. Several actions have been taken to minimize the risks of the matching grants program.** Experience from implementing matching grant programs in other countries reveal risks related with the selection process, including capture and corruption. An independent selection committee has been included in the design of the matching grants program to minimize such risks. There is also a risk due to the fact that Armenian firms have not focused on quality upgrading and are thus not well versed in applying for, and utilizing matching grants effectively. The program has therefore been designed to be a two-step process, with the first stage including an export readiness assessment, leading to the development of a comprehensive export promotion plan.

## APPRAISAL SUMMARY

### C. Economic and Financial Analysis

**57. The project is expected to have significant positive economic effects, with a net present value estimated at US\$34.3 million after taking the project costs into consideration.** The economic justification for government intervention in the activities of the project is to alleviate the primary market and institutional failures that market forces alone are not efficient to tackle. Estimations used to quantify the monetary benefits of the project activities employ existing research on the impact of increases in budgets for export promotion agencies, matching grants, investments in metrology, as well as economic impact of support for cluster development (see Annex 10). Most of the benefits are expected to accrue over a ten-year horizon, taking into account the time needed for this type of structural changes to have a full impact on the economy. The net present value (NPV) of the project is estimated at US\$ 34.3 million using a 10 percent discount rate.

### D. Technical

**58. The technical design of the proposed Project is based on Armenia’s growth strategy, detailed in the Export-Led Industrial Policy (2011) and ADS 2025, as well as on World Bank’s technical experience and international best practices.** Project design stems from extensive consultations with stakeholders, including government authorities, private sector, donor agencies, and builds upon lessons learned from the implementation of similar World Bank-financed projects.

**59. The analytical underpinnings of the Project are comprehensive.** The 2013 Country Economic Memorandum emphasized the importance of industry and modern service sectors as Armenia’s growth drivers to create a more sustainable pattern of economic development and employment opportunities for Armenia. The World Bank provided extensive technical assistance to Armenia to support the development of its Export Led Industrial policy and the preparation of the strategies of the key sectors identified in the policy. The 2013 Trade Outcome analysis<sup>10</sup> highlighted the fact that the county’s export basket is dominated by resource-based and primary products. In addition, export sophistication declined significantly over the last decade. The Fostering Entrepreneurship in Armenia report<sup>11</sup> underscored key obstacles facing entrepreneurs and SMEs in Armenia, and offered recommendations on how to support competitiveness of the private sector. Finally, a survey commissioned during project preparation informed the design of the matching grants program.

### E. Financial Management

**60. The FM arrangements of FFPMC were reviewed and assessed as acceptable to the Bank for project implementation, subject to agreed actions by the client as described hereafter.** The Project FM assessment undertaken in March-April 2014 confirmed that: (i) internal control and filing systems in place are adequate (while the controls over Exporter

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<sup>10</sup> Armenia Analysis of Selected Trade Outcomes, World Bank 2013.

<sup>11</sup> Fostering Entrepreneurship in Armenia, World Bank 2013.

Development Grants and PPPs schemes need to be developed and described in the OMs); (ii) the FM staff at FFPMC has extensive experience in the Bank-financed project; and (iii) results from the latest annual audit of projects implemented by FFPMC were satisfactory.

**61. The draft implementation manuals for the Exporter Development Grants (under Sub-Component 2.2) and PPPs for Increasing Investment and Export (under Sub-Component 2.3), and describing the operations, implementation arrangements, fund flows and controls over them under Grants and PPPs schemes, were developed.** The approval of final manuals acceptable to the Bank by the MoE is a disbursement condition for Exporter Development Grants and PPPs for increasing investment and exports.

**62. Additional actions have been agreed to strengthen FM aspects.** While not an effectiveness condition, FFPMC will be expected to: (i) prior to the Project effectiveness develop the Project's Financial Management Manual (FMM) acceptable to the Bank to reflect specific activities, funds flow and controls under the Project (the controls and funds flow for Exporter Development Grants and PPPs schemes would be described separately in the Grants and PPPs' implementation manuals), and (ii) before the implementation of Exporter Development Grants and PPPs schemes, hire a consultant to support the FM staff with the Grants and PPS schemes (a capacity building action).

**63. Efforts have been made on a portfolio level to use some elements of the country's Public Financial Management (PFM) system.** In particular, the Treasury system is being used to maintain the designated accounts (DAs) of Bank-financed projects including this project, which plans to open the designated account in the Treasury. In addition, the country budget system will be used for this project, particularly for RBF/DLI scheme under Component 1. For all the other FM elements FFPMC's respective systems are going to be used for this project.

**64. The Designated Account will be used for the disbursement of the Bank financing for project components, except for the RBF/DLI scheme (under Component 1), for which the funds will be directly disbursed by the Bank to the State Budget.** A set of DLIs has been established for Component 1, with a certain ceiling of specified amounts to be disbursed against each DLI. Disbursements for this component will be made against eligible expenditures which are the State Budget lines supporting the Project objectives, and after the auditor's validation of the actual amount of EEPs. For the purposes of the project the EEP will consist of salaries of all enterprise support and quality infrastructure agencies (ADA, IDF, the new IEPI, NCFA, SMEDNC, EIF, NIM, NAB, and SARM), trade representatives' remuneration, the Ministry of Economy staff and the Minister of Economy's staff. The EEP expenditures will in all periods exceed the disbursements for the component (see Annex 4). The MoE will provide to FFPMC the information on the actual EEPs incurred, based on which the FFPMC will reflect in consolidated semi-annual IFRs and consolidated annual financial statements of the project. FFPMC will also be responsible for the preparation of the Withdrawal Applications (WAs) for the disbursements under this component.

**65. For component 1, disbursements will be conditioned on meeting DLIs.** There will be six annual RBF payouts over the course of the loan as outlined in the DLI matrix. The payouts will occur by June each year based on the actual EEP expenditures, validated by the auditor, and DLI conditions met during the previous year. The funds in US\$ will flow directly from the Bank

to the MoF's Treasury's US\$ account at the Central Bank of Armenia (CBA), and upon the deposit of those funds, the MoF's Treasury Single Account (TSA) will be credited with the local currency equivalent at the official exchange rate, as reflected in the Law on State Budget. DLIs will only be reimbursed to the extent that there is a sufficient level of EEPs. When DLIs are not met in the expected time frame the client will be expected to present a thorough explanation for having missed the DLI and a program for future compliance. There will be a mid-term review at the end of the second year of the project to review the DLIs and EEPs and alter if deemed necessary.

**66. The disbursement under RBF/DLI mechanism will be made based on a simplified SOE, (the format of which has been agreed with the Bank), to be validated by an independent auditor, acceptable to the Bank.** The disbursement of funds under other components/activities (other than RBF/DLI mechanism) will follow standard disbursement procedures and will include reimbursement, advance, direct payment and special commitment methods. The validation will be conducted based on the TOR to be agreed with the Bank.

**67. Project management-oriented semi-annual IFRs will be used for the project monitoring and supervision.** The information on RBF/DLI scheme for the project consolidated IFR will be provided to FPPMC by MoE, while for the rest of the project components/activities, the information will be generated from the FPPMC accounting system. FPPMC will be responsible for consolidation of the IFRs.

**68. The audit of the Project will be conducted** (i) by independent private auditors acceptable to the Bank, on TOR acceptable to the Bank and procured by the FPPMC, and (ii) according to the International Standards on Auditing (ISA) issued by the International Auditing and Assurance Standards Board of the International Federation of Accountants (IFAC). The sample audit TOR for the Project was agreed with the Bank.

## **F. Procurement**

**69. Procurement under the project will be carried out in accordance with the World Bank's Guidelines:** Procurement of Goods, Works, and Non-Consulting Services Under IBRD Loans and IDA Credits & Grants by World Bank Borrowers" (January 2011) and "Guidelines Selection and Employment of Consultants Under IBRD Loans and IDA Credits & Grants by World Bank Borrowers" (January 2011), and the provisions stipulated in the Legal Agreement. The World Bank Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credit and Grants dated October 15, 2006 and revised on January 2011, would also apply.

**70. FPPMC at the MoF will be responsible for procurement activities under the project.** FPPMC has successfully implemented more than thirty projects financed by the IDA Credits, IBRD Loans and various grants and has gained sufficient experience in the Bank financed procurement. An assessment of the FPPMC's capacity to implement procurement under the project was carried out in December 2013. Since the existing procurement specialists within FPPMC are already assigned to manage several foreign-financed projects, it was agreed that the project will finance a dedicated procurement specialist. This designated procurement specialist will provide implementation support on various procurement related issues and guidance on the Bank's Procurement and Consultant Guidelines.

**71. As the project will be implemented in an environment where corruption can be perceived as an important issue, adequate mitigation measures have been put in place including:** (i) procurement prior and post reviews to monitor and assess corruption risks; (ii) monitoring of procurement progress against the procurement plan; and (iii) advertising and posting contracting opportunities and contract awards under the project on the official web-site of the Public Procurement of the Ministry of Finance of the Republic of Armenia [www.procurement.am](http://www.procurement.am), in addition to the United Nations Development Business (UNDB). The above will be closely monitored to ensure that the residual project risk is acceptable.

#### **G. Social (including Safeguards)**

**72. Although no resettlement is anticipated during the course of project implementation, OP 4.12 on Involuntary Resettlement has been triggered as the sites and scale of project-supported civil works, notably under Sub-Component 2.3 on PPPs, are not yet known.** A Resettlement Policy Framework (RPF) for the Project has been prepared and will be followed by all Project activities. To minimize potential negative impacts, the project will not finance any PPP activities with significant potential social risks or those that require physical resettlement. The renovation of the NIM will take place on public land and is not expected to require private land acquisition or use.

**73. The project includes the planned restructuring of the NIM (under sub-component 1.2 - Improving the Effectiveness of the National Quality Infrastructure System).** The restructuring process could entail the possibility of retrenchment of some staff in this entity. Efforts will be made to minimize the retrenchment levels by considering alternatives including redeployment of employees to other government agencies. Good practices related to retrenchment will be followed (see Annex 4 for more details). All related policies and procedures will be detailed in the Project Operations Manual (POM).

#### **H. Environment (including Safeguards)**

**74. The Project will finance rehabilitation of premises for the NIM and the NAB.** Because the Project includes a physical investment component involving reconstruction of a building, the OP/BP 4.01 Environmental Assessment is triggered. The envisaged civil works will have modest local environmental and social impacts, which would be easy to mitigate by ensuring that works providers adhere to the conventional good construction and environmental practices. Therefore, the project is classified as environmental Category B. The Borrower prepared and disclosed an Environmental and Social Management Framework (ESMF) and site-specific Environmental Management Plans (EMPs) for works to be undertaken for the rehabilitation of the of the NIM building. EMP for works at NAB premises will be produced, cleared by the Bank and disclosed once the detailed design of this activity is available.

**75. The Project design includes a matching grants program and PPPs to support cluster development and research and skills development which will include civil works.** Construction works under these PPP sub-projects will be subject to environmental screening and will require development of EMPs. Neither program will support businesses that are related to the production of arms, spirits, tobacco, and hazardous substances. The list of activities ineligible for financing from the Grants and PPP schemes will be included into the POM.

## Annex 1: Letter from Government on Institutional Restructuring



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МИНИСТЕРСТВО ЭКОНОМИКИ РЕСПУБЛИКИ АРМЕНИЯ  
МИНИСТР

MINISTRY OF ECONOMY OF THE REPUBLIC OF ARMENIA  
MINISTER

0010, ք.Երևան-10, Մ.Ալկրդյան 5, Հեռ. 56-61-85, Ֆաքս 52-65-77  
0010, г.Ереван-10, М.Алкрдян 5, Тел.(0374-10) 56-61-85, Факс (0374-10) 52-65-77  
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URL: [www.minieconomy.am](http://www.minieconomy.am), Email: [secretariat@minieconomy.am](mailto:secretariat@minieconomy.am)

28.02.2014

Mr. Henry Kerali  
Regional Director for the South Caucasus  
Europe and Central Asia

Dear Mr. Kerali,

The main priority of the Government of the Republic of Armenia as outlined in the recently completed Armenia Development Strategy 2014-2025 is the increase of employment through creation of quality and high productivity jobs with a long-term strategic objective streamlining export promotion and investment attraction activities in order to maximize synergies and make efficient use of resources. Two key tools to accomplish this objective include: i) the Export-led industrial policy which addresses the need to increase the international competitiveness of industry sectors with export potential, and ii) the Investment Policy under preparation which will outline the measures which the Government will implement in order to improve Armenia's competitiveness and value proposition as an investment destination.

The World Bank support is of utmost importance for the achievement of the Government's growth oriented policies. In particular, the proposed Armenia Trade Promotion and Quality Infrastructure Project (TPQI) will support the strengthening of the institutional and investment capacity of the government to carry out the activities required to accomplish the outlined objectives of the Export led Industrial Policy and Investment Policy.

To ensure the efficiency and effectiveness of public administration related to Investment, Exports and Quality Infrastructure, the Government is planning the following activities related to the institutional restructuring of the Enterprise Support Agencies and the National Quality Infrastructure entities in Armenia to be implemented by September 2014:

- The National Competitiveness Foundation of Armenia (NCFA) will be given the mandate to coordinate general competitiveness agenda in Armenia. It will be responsible for formulating the competitiveness vision for the country; ensuring policy coherence and coordination across the different sectors and entities; and conducting evaluations of policy interventions. NCFA will also be responsible for major cross cutting multi-agency projects.

- The Armenia Development Agency (ADA) and Industrial Development Foundation (IDF) will be merged as the sole Investment, Export Promotion and Industrial Development Agency of Armenia under the oversight of the Ministry of Economy. A CEO with an extensive experience will subsequently be competitively recruited with a performance-based salary.
- National Tourism Organization (NTO) will be established under the oversight of the Ministry of Economy solely responsible for national tourism policy implementation by encouraging and promoting the development of tourism to and within Armenia.
- A new organizational structure and staffing plan for the National Institute of Metrology will be adopted that is in line with international best practice.
- A new organizational structure and staffing plan for the Accreditation Body will be adopted that is in line with international best practice.

The Government will regularly update you team on the progress and results of this reforms. We also expect the World Bank support in implementation of these activities.

Taking this opportunity I would like to reiterate the importance of the TPQI Project for the implementation of the Armenian Development Strategy.

Sincerely,



VAHRAM AVANESYAN



## Annex 2: Results Framework and Monitoring

### Armenia: Trade Promotion and Quality Infrastructure Project

#### Project Development Objectives

**PDO Statement**

The Project Development Objective (PDO) is to strengthen the Borrower's capacity to provide export promotion, investment attraction and quality management services to firms

**These results are at**

Project Level

#### Project Development Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values						Frequency	Data Source/ methodology	Responsibility for Data Collection	Description (see table below)
				YR1	YR2	YR3	YR4	YR 5	End Target				
1. New customers for exporters generated through the foreign representatives		Number	0	0	6	12	30	35	40	Annual	Project progress reports	PMU Project Manager	
2. Cluster development and research and skills development PPPs developed		Number	0	0	2	3	5	6	7	Annual	Project progress reports	PMU Project Manager	
3. Successful investments facilitated by IEPI		Number	0	0	1	2	3	3	4	Annual	Project progress reports	PMU Project Manager	

4. Industrial Laboratories of the National Institute of Metrology accredited by an accreditation organization that is a signatory to an MLA/MRA from ILAC or IAF.		Number	0	0	0	0	1	1	2	Annual	Project progress reports	PMU Project Manager	
5. National Accreditation Body becomes a signatory to a Multilateral agreement (MLA) or Mutual Recognition agreement (MRA) with an international accreditation organization such as ILAC or IAF		Text	Not a member		NAB becomes an affiliate member of an international organization (ILAC, IAF)				NAB achieves MLA or MRA	Annual	Project progress reports	PMU Project Manager	

### Intermediate Results Indicators

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values						Frequency	Data Source/ methodology	Responsibility for Data Collection	Description (see table below)
				YR1	YR2	YR3	YR4	YR 5	End Target				
<b>Component 1: Improving the Effectiveness of the Trade Promotion and Quality System<sup>12</sup></b>													
1. Strengthening investment and export promotion services		Text	ADA and IDF with duplicative functions	i.	iv.	iv.	iv.	iv.	iv.	Annual			
i. Decree on Investment Policy issued				ii.	v.	v.	v.	v.	v.				
ii. Merger of ADA and IDF into IEPI completed				iii.	vi.	vi.	vi.	vi.	vi.				
iii. Government decree issued to establish the NTO				iv.									
iv. IEPI staffed				v.									
v. IEPI budget for agency included in State budget				vi.									
vi. Monitoring and Evaluation of IEPI conducted													

<sup>12</sup> See DLI Table in Annex 3 for detailed description of indicator, data sources and responsibility for data collection

2. Strengthening national metrology services		Text	NIM not in accordance with international standards	i. ii. iii.	i. ii. iii.	i. ii. iii.	i. ii. iii.	i. ii. iii.	i. ii. iii.	Annual			
i. NIM staffed													
ii. Adequate budget for NIM included in State budget													
iii. Monitoring and Evaluation of NIM conducted													
3. Strengthening accreditation services		Text	NAB not in accordance with international standards	i. ii. iii.	i. ii. iii.	i. ii. iii.	i. ii. iii.	i. ii. iii.	i. ii. iii.	Annual			
i. NAB staffed													
ii. Adequate budget for NAB included in State budget													
iii. Monitoring and Evaluation of NAB conducted													
<b>Component 2 – Promoting Investment and Exports</b>													
1. Investment inquiries that lead to site visits generated by foreign representatives		Number	0	0	3	6	9	10	12	Annual	Project progress reports	PMU Project Manager	
2. Export related leads generated by foreign representative		Number	Not in existence	0	30	50	80	90	100	Annual	Project progress reports	PMU Project Manager	

3. Share of beneficiaries of the Exporter Development Grants that access new markets and introduce new products (firm ownership disaggregated by gender)		Percent	Not in existence	0	5	10	30	40	50	Annual	Project progress reports	PMU Project Manager	
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**Component 3: Modernizing the National Quality Infrastructure**

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1. Industrial metrology laboratories built		Number	0	0	0	3	5	6	7	Annual	Project progress reports	PMU Project Manager	
2. Accreditations conducted in line with international practice issued by NAB		Number	0	0	5	10	15	18	20	Annual	Project progress reports	PMU Project Manager	
3. Share of NIM technical staff trained in internationally recognized calibration methods		Percent	0	0	10	20	40	50	60	Annual	Project progress reports	PMU Project Manager	
4. Share of NAB technical staff trained in international methodology for Accreditation		Percent	0	0	10	20	40	50	60	Annual	Project progress reports	PMU Project Manager	

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### Description of indicators

<b>Project Development Objective Indicators</b>	
Indicator Name	Description (indicator definition etc.)
1. New customers for exporters generated through the foreign representatives	Number of contracts with new customers for exporters related to the efforts of the foreign trade representatives
2. Cluster development and research and skills development facilities developed	Number of facilities to be developed through PPPs under Component 2.3
3. Successful investments facilitated by Investment and Export promotion agency	Number of new investments by new or existing FDI in Armenia initiated and supported by Investment and Export promotion agency
4. Industrial Laboratories of the National Institute of Metrology accredited by an accreditation organization that is a signatory to an MLA/MRA from ILAC or IAF.	Number of industrial laboratories which will be established under the component 3, to be accredited by an accreditation organization that is a signatory to an MLA/MRA from ILAC or IAF.
5. National Accreditation Body becomes a signatory to a Multilateral agreement (MLA) or Mutual Recognition agreement (MRA) with an international accreditation organization	NAB obtains international recognition by formally signing an MLA or MRA which indicates that its accreditations will be accepted internationally

### **Intermediate Results Indicators**

**Component 1: Improving the Effectiveness of the Trade promotion and Quality system** (see DLI Table in Annex 3 for detailed description of indicators)

#### **Component 2 – Promoting Investment and Exports**

Indicator Name	Description (indicator definition etc.)
1. Investment inquiries that lead to site visits generated by foreign representatives	Number of investment inquiries that lead to site visits generated by IEPI foreign representatives
2. Export related leads generated by foreign representatives	Number of new customer relationships initiated and developed by IEPI foreign representatives and transferred to exporters
3. Share of beneficiaries of the Exporter Development Grants that access new markets and introduce new	Beneficiaries who access new markets and introduce new products through Exporter Development Grants provided under component 2.2 divided by the total number of

products (firm ownership disaggregated by gender)	beneficiaries
<b>Component 3: Modernizing the National Quality Infrastructure</b>	
1. Industrial metrology laboratories built	Number of industrial metrology laboratories built under the project
2. Accreditations conducted in line with international practice issued by NAB	Number of accreditations issued by NAB conducted in line with international practice
3. Share of NIM technical staff trained in internationally recognized calibration methods	NIM Technical staff trained in internationally recognized calibration methods divided by the total number of NIM staff
4. Share of NAB technical staff trained in international methodology for Accreditation	NAB Technical staff trained in international methodology for Accreditation divided by the total number of NAB technical staff

## Annex 3: Detailed Project Description

### Armenia: Trade Promotion and Quality Infrastructure Project

**The Project Development Objective (PDO) is to strengthen the government's capacity to provide export promotion, investment attraction and quality management services to firms.**

**The project has 4 components:**

**Component 1: Improving the Effectiveness of the Trade Promotion and Quality system (US\$10 million – to be disbursed against the achievement of DLIs)**

1. **The objective of this Component is to promote reforms aimed at improving the trade promotion and quality infrastructure system, which will improve service delivery to Armenian firms.** This results-based component will disburse loan funds to the government for agreed-upon actions, outputs and outcomes (“Disbursement-Linked Indicators” or DLIs) that result in improvements to the trade promotion and quality system. The project is designed with a results-focused component (Component 1) to be complemented by the investments financed through Components 2 and 3 of the project and other sources including the government and donor funds outside the project. The carefully selected DLIs developed in collaboration with the government are critical for the institutional improvements that underpin both the governments’ export led growth agenda and the project objectives. The government will receive disbursements based on established amounts allocated to the achieved DLIs to the extent there are sufficient EEPs incurred by the government.

2. **This component will focus on the achievement of the following results:**

- i. Strengthening of the national investment and export promotion services;*
- ii. Strengthening of the national metrology services; and*
- iii. Strengthening of the national accreditation services.*

3. **The component will support the government’s efforts to improve service delivery in the trade promotion and quality system by rewarding results achieved in:** (i) streamlining and strengthening the institutional framework for trade promotion and quality infrastructure by merging duplicative agencies; (ii) creating organizational structures that are in line with international best practice; (iii) improving the monitoring and evaluation process of the agencies by incorporating annual reviews and action plans and independent evaluations; and (iv) ensuring adequate budget from the state for the agencies to perform the activities outlined in their action plans.

4. **Sub-Component 1.1 Strengthening of the national investment and export promotion services:** The objective of this component is to support activities that will create the enabling environment for investment and exports and ensure the development of effective investment and export promotion services that can meet the needs of Armenian firms and FDI. This component will disburse according to the achievement of the following results: (i) development and implementation of an investment reform map to attract investment to the country; (ii) the merger of ADA and IDF into the new Investment, Export Promotion and Industrial Development Agency (IEPI); (iii) establishment of the new National Tourism Organization (NTO); (iv) staffing the new IEPI with an organizational structure in line with international best practice; (v) improving the monitoring and evaluation process of the IEPI by incorporating annual reviews



and action plans and independent evaluations; and (vi) ensuring adequate budget from the state for the IEPI to perform the activities outlined in its action plans.

5. **Sub-Component 1.2 Strengthening of the national metrology services.** The objective of this component is to reorganize NIM into a world class institution that can provide metrology services operating under internationally-recognized quality management systems. This component will disburse according to the achievement of the following results: (i) staffing the organization with staff with the required skill set, (ii) providing the necessary budget for the staff and activities required to run internationally accredited metrology laboratories, (iii) improving the monitoring and evaluation process of the NIM by incorporating annual reviews and action plans and independent evaluations; and (iv) achieving international accreditation for the laboratories.

6. **Sub-Component 1.3 Strengthening of the national accreditation services:** The objective of this component is to strengthen the capacity of the new NAB to become an internationally-recognized accreditation institution. This component will disburse according to the achievement of the following results: (i) staffing the organization with staff with the required skill set, (ii) providing the necessary budget for the staff and activities required to achieve recognition, (iii) improving the monitoring and evaluation process of the NAB by incorporating annual reviews and action plans and independent evaluations and (iv) achieving international recognition by an international accreditation organizations (ILAC or IAF).

**Annex Table 1: Details for Disbursement Linked Indicators<sup>13</sup>**

Disbursement- Linked Indicators	Expected Date of Achievement						Definition, Verification Protocols and Source of Information <sup>14</sup>
	June 2015	June 2016	June 2017	June 2018	June 2019	June 2020	
<i>Sub-Component 1.1 Strengthening of the national investment and export promotion services</i>							
<b>DLI 1:</b> Government Decree on adoption of Investment Reform Map issued	X						DLI is met when Government decree is issued. PMU to send Government decree to WB
<b>DLI 2:</b> Merger of ADA and IDF into the IEPI	X						DLI is met when IEPI Charter is completed. PMU to send IEPI Charter and Government decree establishing IEPI to WB
<b>DLI 3:</b> Government decree issued to establish NTO	X						DLI is met when Government decree is issued. PMU to send decree to WB
<b>DLI 4:</b> IEPI staffed with organizational structure in line with international best practice	X	X	X	X	X	X	DLI is met when <ul style="list-style-type: none"> <li>• IEPI board selected</li> <li>• Organizational chart approved by IEPI Board</li> <li>• CEO and deputies competitively hired</li> <li>• Agency is staffed in line with approved organizational chart</li> </ul> PMU to send: i) approved organizational chart, ii) government decision on selection of IEPI Board, and iii) TORs and other documentation regarding the selection process including CVs of all candidates to the WB
<b>DLI 5:</b> Adequate budget for IEPI included in State budget	X	X	X	X	X	X	DLI is met when budget for the next fiscal year for agency staff and activities as outlined in the Action Plan is included in the annual State Budget PMU will send budget documentation and link to website of published State budget to WB
<b>DLI 6:</b> Monitoring and Evaluation conducted for IEPI	X	X	X	X	X	X	DLI is met when: <ul style="list-style-type: none"> <li>• Annual report for previous year is completed by IEPI and approved by IEPI's Board and published on website</li> <li>• Annual Action plan including budget for the year is completed by agency and approved by IEPI Board</li> </ul>

<sup>13</sup> DLIs will be reviewed annually and must be satisfactory to the World Bank.

<sup>14</sup> All documentation must be translated into English before submission to the World Bank.

Disbursement- Linked Indicators	Expected Date of Achievement						Definition, Verification Protocols and Source of Information <sup>14</sup>
	June 2015	June 2016	June 2017	June 2018	June 2019	June 2020	
							<p>and published on website</p> <ul style="list-style-type: none"> <li>Independent evaluation of IEPI is conducted (in 2017 and 2019 only) and published on website with management response on planned corrective actions</li> </ul> <p>PMU will send reports and links to website location of reports to the WB</p>
<b><i>Sub- Component 1.2 Strengthening of the national metrology services</i></b>							
<b>DLI 7:</b> NIM staffed with organizational structure in line with international best practice	X	X	X	X	X	X	<p>DLI is met when</p> <ul style="list-style-type: none"> <li>NIM board is selected</li> <li>Organizational chart is approved by NIM Board</li> <li>Director is competitively hired</li> <li>NIM is staffed in line with approved organizational chart</li> </ul> <p>PMU to send: i) approved organizational chart, ii) government decision on selection of NIM Board, and iii) TORs and other documentation regarding the selection process including CVs of all candidates to the WB</p>
<b>DLI 8:</b> Adequate budget for NIM included in state budget	X	X	X	X	X	X	<p>DLI is met when budget for agency staff and activities as outlined in the Action Plan is included in the annual State Budget</p> <p>PMU will send budget documentation and link to website of published State budget to WB</p>
<b>DLI 9:</b> Monitoring and Evaluation conducted	X	X	X	X	X	X	<p>DLI is met when:</p> <ul style="list-style-type: none"> <li>Annual report for previous year is completed by agency and approved by NIM Board and published on website</li> <li>Annual Action plan for the year including budget is completed by NIM and approved by its Board and published on its website</li> <li>Independent evaluation of NIM is conducted (in 2017 and 2019 only) and published on its website with management response on planned corrective actions</li> </ul> <p>PMU to send reports and links to website location of reports to the WB</p>

Disbursement- Linked Indicators	Expected Date of Achievement						Definition, Verification Protocols and Source of Information <sup>14</sup>
	June 2015	June 2016	June 2017	June 2018	June 2019	June 2020	
<b>DLI 10:</b> International Accreditation attained for at least 2 metrology laboratories					X		DLI is met when accreditation of the laboratories by an accreditation organization that is a signatory to an MLA/MRA from ILAC or IAF is received. PMU to send International Accreditation report certificate to WB
<b><i>Sub- Component 1.3 Strengthening of the national accreditation services</i></b>							
<b>DLI 11:</b> NAB staffed with organizational structure in line with international best practice	X	X	X	X	X	X	DLI is met when <ul style="list-style-type: none"> <li>• NAB board is selected</li> <li>• Organizational chart is approved by NAB Board</li> <li>• Director is competitively hired</li> <li>• NAB is staffed in line with approved organizational chart</li> </ul> PMU to send: i) approved organizational chart, ii) government decision on selection of NAB Board, and iii) TORs and other documentation regarding the selection process including CVs of all candidates to the WB
<b>DLI 12:</b> Adequate budget for NAB included in State budget	X	X	X	X	X	X	DLI is met when budget for NAB staff and activities as outlined in the action plan included in annual State Budget PMU will send budget documentation and link to website of published State budget to WB
<b>DLI 13:</b> Monitoring and Evaluation conducted	X	X	X	X	X	X	DLI is met when: <ul style="list-style-type: none"> <li>• Annual report for previous year is completed by agency and approved by NAB Board and published on website</li> <li>• Annual Action plan including budget for the year is completed by NAB and approved by its Board and published on website</li> <li>• Independent evaluation of NAB is conducted (in 2017 and 2019 only) and published on its website with management response on planned corrective actions</li> </ul> PMU to send reports and links to website location of reports to the WB

Disbursement- Linked Indicators	Expected Date of Achievement						Definition, Verification Protocols and Source of Information <sup>14</sup>
	June 2015	June 2016	June 2017	June 2018	June 2019	June 2020	
<b>DLI 14:</b> NAB attains MLA or MRA in testing laboratories according to ISO/IEC 17025					X		DLI is met when ILAC or IAF confers MLA or MRA status to NAB. PMU to send MLA or MRA documentation to WB

## **Component 2 - Promoting Investment and Exports (US\$29.2 million)**

6. **The objective of this component is to strengthen government's capacity to actively provide services to improve the capacity of local exporters to compete in foreign markets, facilitate cluster development, and attract efficiency seeking FDI.** The component will focus on promoting investment and exports by financing activities under the following three sub-components

### **Sub-component 2.1: Support services provided by Investment, Export Promotion and Industrial Development Agency (IEPI) (US\$6.3 million).**

7. **This sub-component will finance the creation of new investment and export promotion programs to be implemented by the new IEPI that will build the foundation to promote both inward FDI and export.** A suite of new programs will be financed under this sub-component, including:

- ***Establishing foreign representatives in key export and investment markets.*** This activity will finance representatives to conduct marketing on behalf of exporters and promote Armenia as an investment destination in foreign markets. Activities to be financed include office establishment costs, market analysis, staff selection, and salaries required for the representation offices. It is anticipated that up to 6 offices will be established. Detailed criteria and procedures for establishment of foreign representatives will be included in the POM.
- ***Developing new Export Promotion Services:*** Three new services to exporters will be developed and financed by this sub-component: (i) *Exporter's Manual* – a guide for exporters on how to access new foreign markets, finance export transactions, and handle orders and shipments; (ii) *Export Readiness Assessment* which will include an interactive, on-line diagnostic tool to assess a company's export readiness in terms of both product and company readiness; and export advisory services provided by a qualified export specialist (either export promotion agency in-house staff or externally contracted professional), and (iii) *Export Training Programs* to help companies develop the skills needed to expand their businesses and export.
- ***Image Building and Investment Outreach services for new and existing investors:*** This activity will finance: (i) the development and implementation of a targeted marketing campaign and communications strategy; (ii) investment generation efforts by the foreign representatives to identify and contact potential investors; (iii) investor servicing to help incoming investors get established and operational; and (iv) aftercare services to support existing investors and encourage them to expand their investments.
- ***Building the IT infrastructure for the agency:*** This will involve the procurement of IT equipment and the development of a Customer Relationship Management (CRM) system to improve the efficiency of operations.
- ***Training and capacity building of staff:*** This activity will finance capacity building activities for IEPI staff including hiring an international expert to serve as a resident

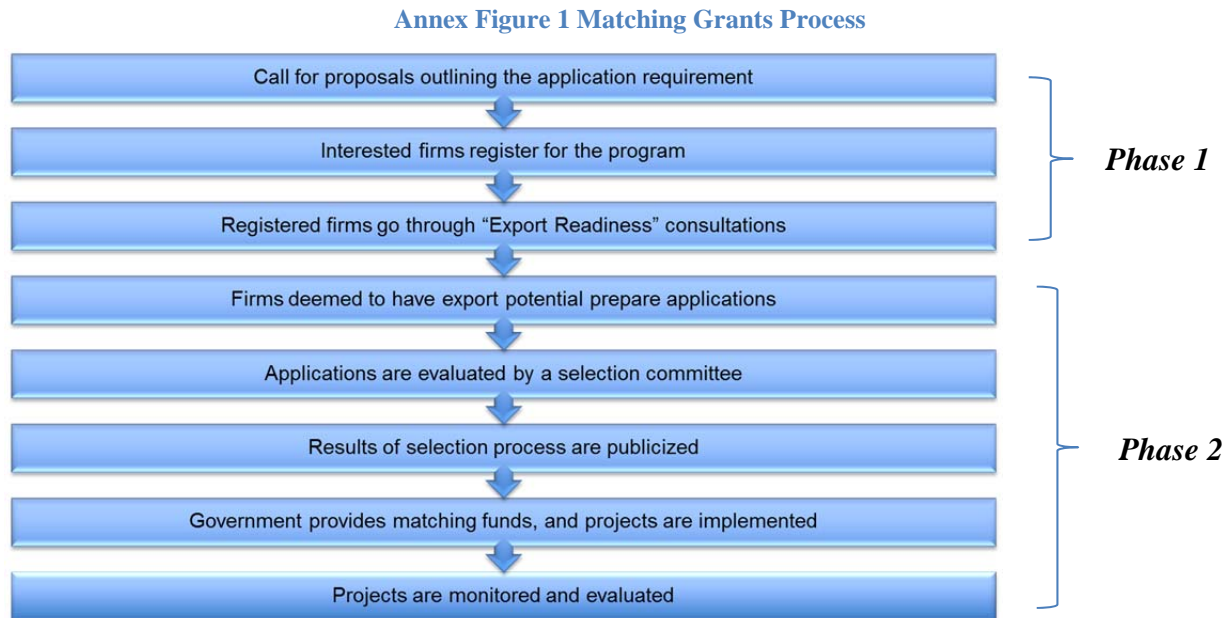
advisor for the agency. The resident advisor will support the development of programs; support strategic planning and execution; staff-building and assessment of training needs; design and implementation of operational procedures; and implementation of the grants program (see sub-component 2.2 below).

### **Sub-component 2.2: Exporter Development Grants (US\$3.6 million).**

8. **The objective of this subcomponent is to co-finance the acquisition of knowledge and marketing services to improve the products, services and processes of SMEs with export potential and increase the awareness of their products and services in foreign markets.** A survey of firms in the priority sectors was conducted during preparation of the loan to design this sub-component and sub-component 2.3 (see Annex 9 for details of the survey). The grants will fund SME's export related knowledge and marketing activities which could include among other activities: (i) consulting services to help firms upgrade their managerial and technical capabilities; (ii) attaining the requirements for the acquisition of international certifications required for exports; (iii) development of market entry/foreign expansion strategies; (iv) development and execution of a marketing plans, including attendance at trade shows, exhibits and individual marketing trips; (v) customized company-specific foreign market research; (vi) development of new products and services for export, and other relevant export promotion services. Applications from individual firms or consortia of firms will be accepted through a series of calls-for proposals. The project will finance up to 70 percent of a proposed set of activities proposed by the beneficiaries while the beneficiaries will contribute a minimum of 30 percent in cash and/or in kind. The project will also fund the grant administration expenses including the hiring of a grant manager and compensation for an independent selection committee. Detailed criteria and procedures for the grants (including valuation of in-kind contributions) will be included in the Grant Implementation Manual.

9. **The exporter development grants will be offered on a periodic tender basis through a two-step process in line with international best practice.** This approach is designed to maximize the benefit to individual firms and to help them understand the extent of needs to achieve their export market objectives. In Step 1, each company that registers for the program will undergo an exporter readiness assessment (1-2 days) at no cost to the company conducted by independent consultants engaged by IEPI to help the applicants determine their level of export readiness and eligibility for the grant. This exercise would be designed to help applicants: (i) define their export objectives; (ii) understand the realistic potential of the firm to achieve the desired level of exports; and (iii) hone in on exactly what is needed to achieve their objectives and the support needed. The overall objective of the first step is to determine whether the firm is best suited for the exporter development grant support or would be better served by using the other programs offered by IEPI such as foreign representative office support or exporter training workshops. A company that is determined to not be eligible for the grants could reapply in the future after taking the steps to attain eligibility indicated by the consultant. This advisory support would be a prerequisite to submission of the final grant applications, and a copy of the consultant's report and recommendations would be included as an annex to the grant application. To prevent conflicts of interest, any consultant involved in providing the Phase 1 diagnostic needs assessment would be prohibited from providing advisory services during Phase 2 to the same firm during grant implementation. Phase 2 will entail the application process as outlined in

Annex Figure 1. Detailed criteria and procedures for the grants will be included in the Grant Implementation Manual.



10. **The project will also fund the grant administration expenses including the set-up of a grant management unit within the IEPI and support for program beneficiaries which will include the following activities:**

- ***Hiring of a grant manager:*** A grant manager will be hired to run the grant program within the grant management unit of the agency (including supporting beneficiaries with the application process). The manager will be supported by agency staff.
- ***Engagement of independent selection committee.*** To ensure meritorious and transparent award decision-making, this sub-activity will support the establishment of a due diligence and selection process through an independent investment committee, comprised of professionals from private industry, the entrepreneurial community, the financial sector and applied research sectors who will be responsible for evaluation of applications and financing decisions.
- ***Project visibility events and workshops.*** This sub-activity will consist of events and workshops during the course of the project to inform the public and potential beneficiaries and encourage applications. They will include, but not be limited to: project launch, call for proposals, award announcements, workshops on export readiness and the benefits of industry collaboration, as well as networking events for SMEs, entrepreneurs, academia, and foreign investors.

**Sub-component 2.3: Public Private Partnerships (PPPs) to promote Cluster Development and Research and Skills Development (US\$19.3 million).**



11. **The objective of this sub-component is to: (i) strengthen the relationships within domestic industries with export potential in order to accelerate the upgrading of these industries, (ii) strengthen the relationships with existing efficiency-seeking high-value added FDI and enhance the potential for new FDI, and (iii) facilitate industry-academia collaboration.** EIF will be the implementing agency for the proposals related to IT and Engineering while IEPI will be the implementing agency for the other sectors. The sub-component will include 2 instruments: Cluster development PPPs and Research and skills development PPPs.

12. **Cluster development PPPs will strengthen industry clusters by financing: (i) the development of industry-wide initiatives that would improve the competitiveness of the entire industry such as developing sectoral branding and marketing strategies; and (ii) building industry specific facilities that are prohibitively expensive for individual firms in order to develop economies of scale and improve productivity such as quality and testing laboratories, training centers and common logistics infrastructure.** These instruments will be funded through agreements between the government and the private sector participant which is expected to be an industry consortium. All proposals will need to include SMEs as part of the consortium and specifically explain how the initiative will facilitate the growth of the SMEs in the sector in order to be eligible. For proposals involving building of facilities, the applicant will need to identify an academic or research institution that it will be partnering with. Applications will be accepted on a rolling basis and will be reviewed by a selection committee of professionals from the private sector and academia. The project will finance up to 50 percent of each initiative while the beneficiaries will contribute up to 50 percent in cash and/or in kind. Funds will not be directly given to the industry but will be paid directly to the service providers.

13. **Several industries have expressed interest in the cluster development PPPs.** Potential first movers include: (i) the engineering sector which has proposed the establishment of a facility for training and testing; and (ii) the wine industry which has proposed a package including a testing and bottling laboratory to improve the grape varieties and packaging, developing a branding strategy for the industry, and expert assistance for logistics support. While there are no dollar limitations (the selection committee will determine the viability of the proposals), it is anticipated that up to 4 projects will be funded under the cluster PPPs.

14. **Research and skills development PPPs will be targeted at encouraging efficiency-seeking FDI (expected to be primarily in high tech) to ramp up their level of engagement in the country and facilitate skills development by funding joint projects between multinationals and academia to develop enabling infrastructure, such as joint laboratories and Innovation centers.** This sub-component is leveraging a model that has been proven to work in Armenia where the government provides the infrastructure and the multinational provides equipment and technical know-how. As in previously completed PPPs, the facilities will be located in academic institutions and owned by the government. These instruments will be funded through agreements between the government and the private sector participant (industry association or multinational). The project will finance up to 50 percent of each initiative while the beneficiaries will contribute up to 50 percent in cash and/or in kind. There are several initiatives in the pipeline and a proposal with a major multinational is currently under negotiations (this will not be included in the project) which will include upgrading academic programs within universities, providing state of the art equipment to students and researchers to

implement relevant research projects and access to complex software to develop social analytics and mobile application. Memorandums of Understanding (MOUs) have been signed with some other major multinationals and high-level discussions have been initiated in several areas including developing capabilities in Cloud computing and network technologies. The government has requested Bank support due to the extensive pipeline and in anticipation of a decline in other donor funding. While there are no dollar limitations (the selection committee will determine the viability of the proposals), it is anticipated that up to 4 projects will be funded under the research and skills development PPPs.

15. **There will be no specific application process associated with this activity.** EIF or IEPI will be the counterpart on behalf of the government in negotiations with the multinationals. A PPP expert funded by the project will support these negotiations. Once a preliminary agreement is reached, the implementing agency (EIF or IEPI) will submit the proposal to the selection committee which will make the final decision on whether the proposal is viable and will have a beneficial impact on the Armenian economy.

16. **The PPPs sub-component will fund civil works including renovations of existing infrastructure and could potentially include new construction.** In the case that PPPs involving new construction are approved, the government has indicated its readiness to provide public land for construction. Installation and upgrading of utilities including electricity, water and sanitation facilities as well as site demarcation and fencing of plots will also be funded. In the case that there are civil works involved; the government will conduct the construction and will own the facility. The operations of the facility could be conducted by the government, the industry association or an independent party depending on the agreement reached on what is the best mode of operations. The project will not finance any activities with significant potential negative environmental or social risks or that require resettlement. Detailed criteria and procedures for the grants (including valuation of in-kind contributions) will be included in the PPP implementation manual.

17. **The project will also fund the PPP administration expenses including the setup of a PPP management unit within the implementing agencies (EIF and IEPI) and support for program beneficiaries which will include the following activities:**

- ***Hiring of PPP managers:*** Two PPP managers (one based in IEPI and the other in EIF) will be hired to coordinate the PPP programs within the PPP management unit of the implementing agency (including supporting beneficiaries with the application process) and will be supported by agency staff.
- ***Engagement of a PPP expert:*** A PPP expert will be engaged to design the projects and support negotiations with the multinationals in order ensure that the government's interests are captured in the agreements and the public good is maximized.
- ***Engagement of independent selection committee.*** To ensure meritorious and transparent award decision-making, this sub-activity will support the establishment of a due diligence and selection process through (i) an independent selection committee, comprised of Armenian and foreign professionals knowledgeable in cluster development, joint ventures and technology development from the private sector and applied research sector who will

be responsible for evaluation of project applications and financing decisions; and (ii) engagement of international experts as peer reviewers for technical due diligence process, as needed.

- ***Communication and outreach.*** This sub-activity will finance the dissemination of information on the PPP programs including a project launch workshop, industry specific networking events and project related trips.
- ***Technical assistance for beneficiaries.*** This sub-activity will include technical assistance to industry associations for their establishment and setup of association operations and training for academics to help them understand fundamentals of business operations and practical application of R&D to benefit market and commercial needs. Institution-specific training will be provided in areas of additional expertise needed, as identified by the PPP unit. It is expected that training and mentoring will be provided by reputable international experts and organizations approved by the implementing agency.

### **Component 3: Modernizing the National Quality Infrastructure (US\$8.7 million)**

18. **The objective of this component is to modernize metrology and accreditation services to strengthen the competitiveness of local manufacturers.** This component will have three main sets of activities: (i) much needed infrastructure investments including the renovation of the industrial metrology building and laboratories, purchase of equipment for the laboratories and equipping the NIM staff with the skills to operate the laboratories; (ii) refurbishment of the NAB offices and facilitating service delivery improvements; and (iii) Development of database of catalogue of standards for National Institute of Standards (SARM).

19. **Sub-component 3.1: Renovation of industrial metrology building and laboratories, purchase of equipment and capacity building for NIM staff.** The objective of this sub-component is the development of industrial metrology laboratories that are in line with international standards. This sub-component will finance the renovation of a building to house the industrial metrology laboratories including the design and construction of the seven key industrial metrology laboratories identified in the National Metrology Strategy within the building. A suitable building for laboratory is required, and the basic requirements for laboratory are environmental conditions ensured by specialized air conditioning and heating system and specific mechanical and electrical conditions. A building owned by the NIM – the former Opto-physics Institute has been identified as a candidate to house the laboratories. The project will also procure equipment and furniture for the seven key industrial metrology laboratories identified in the national metrology strategy. This sub-component would also finance the hiring of an international resident advisor that will work with the staff to build the skills of their staff, and deliver the staff training required for the effective and efficient operations of the laboratories, and a firm to support the implementation of a quality management system (QMS) in accordance to ISO 17025 in the industrial metrology laboratories. Furthermore, this sub-component will fund development of guidelines and manuals for operations and staff training, which includes among others: (i) general metrological aspects; (ii) international legal metrology procedures; (iii) internationally accepted calibration procedures; (iv) the operation of new equipment; (v) quality management for laboratories, etc.

20. **Sub-component 3.2: Refurbishment of NAB offices and facilitating service delivery improvements.** The objective of this sub-component is to support the NAB to achieve its goal of becoming an internationally recognized body by obtaining MLAs and/or MRAs with the international accreditation bodies. This sub-component will finance: (i) the refurbishment of the office space allocated to the NAB; (ii) the hiring of an international resident advisor that will build the skills of the staff and deliver the staff training required for the effective and efficient operations of the NAB; (iii) development of guidelines and manuals for operations; (iv) workshops and training program on select topics related to the accreditation process; and (v) development of an IT management system including on-line application system and database.

21. **Sub-component 3.3: Development of database of catalogue of standards for SARM.** The objective of this sub-component is to support the SARM's efforts to build a modern IT infrastructure to improve the efficiency of its operations by upgrading of the SARM website and the creation of an IT database to make the catalogue of standards available online. This sub-component will finance: (i) establishing an electronic library and database of standards including the procurement of the relevant international standards documents (ISO-IEC, CEN/CENELC) and (ii) procurement of IT equipment.

#### **Component 4: Project Management and Monitoring and Evaluation (US\$2 million)**

22. **The objective of this component is to finance the operations and monitoring of the program.** Given the various entities involved in this project, the MoE will oversee the implementation of the project with a PMU set up within the MoE. FFPMC will be responsible for the fiduciary aspects of the project activities. This component will finance: (i) consultants employed as part of the PMU including the project manager and other required staff including a translator, a social and environmental safeguards specialist and a monitoring and evaluation specialist; (ii) required goods and services to support the functioning of the PMU as needed, including office equipment, (iii) the incremental operating costs for the MoE PMU team and stakeholders including IEPI, EIF and FFPMC incurred on account of project implementation (which includes vehicle rental, cost of fuel, insurance, operation, and maintenance of vehicles, minor office equipment, office supplies, utilities, communication and media advertisement costs, printing and publications (electronic and/or paper), maintenance costs, training, meetings and in-country travel costs, translation, and salaries, including health benefits, but excluding salaries for civil servants, and other expenditures that may be agreed with the World Bank during project implementation); and (iv) all project related audits.

## Annex 4: Implementation Arrangements

### *Project administration mechanisms*

1. **The MoE will be responsible for the entire project and will have the overall project coordination role.** High-level management of the project will be carried out by a Project Steering Committee (PSC), chaired by the Minister of Economy and with representation of several key participating institutions: the Ministry of Finance (MoF), the FFPMC, stakeholder agencies (IEPI, EIF, NIM, NAB and SARM) and relevant technical departments in MoE (Investment Policy Department, Industrial Policy Department, IT and Innovation Policy Department, Quality Infrastructure and Technical Regulation Department and Financial and Budgeting Department).

2. **The MoE will establish a Project Management Unit (PMU) within the ministry to oversee project implementation, provide advice and support to the agencies participating in the project, and report to the PSC on project implementation.** The PMU will include a Project Manager, M&E specialist, an Environment and Social Safeguards Specialist, IT Expert, Engineer and Translator. The PMU will provide for overall management and monitoring and evaluation of the project. Each implementing agency (IEPI, EIF, NIM, NAB and SARM) will create an internal working group that will coordinate the implementation of its project activities and provide report on progress of the project implementation to the Project Manager. The Project Manager will be responsible for:

- Carrying out site visits and ensuring that the project activities are implemented properly and on time;
- Reporting on project progress to the Project Management group and the World Bank;
- Providing support to the Working Groups established for each component of the project;
- Disseminating project related information and provide necessary information to external stakeholders; and
- Ensuring that the project's reviews are conducted.

3. **FFPMC will be responsible for fiduciary arrangements (including financial management and procurement).** FFPMC will be responsible for ensuring the proper flow of funds, the timely provision of counterpart funding, financial monitoring of project activities, and the replenishment of the special account and allocation of funds for project activities<sup>15</sup>.

4. **The components will be implemented as follows:**

- **Component 1:** The PMU at MoE will be responsible for reporting the achievement of the DLIs by providing documentation of the achievement of the DLI and of the actual EEPs to the Bank with copies to FFPMC. The MoE will provide to FFPMC the information on the actual EEPs incurred, based on which the FFPMC will reflect in consolidated semi-annual IFRs and consolidated annual financial statements of the project. FFPMC will also be responsible for the preparation of the withdrawal applications (WAs) for the

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<sup>15</sup> FFPMC will be responsible for the planning and budgeting of the Component 2, 3 and 4 under the project, while the responsibility of the planning, budgeting and reporting under Component 1 will be on the MOE.

disbursements under this component. Disbursements will be conditioned on meeting DLIs, and the Bank will reimburse the actually incurred EEPs, after those amounts are validated by independent auditor acceptable to the Bank.

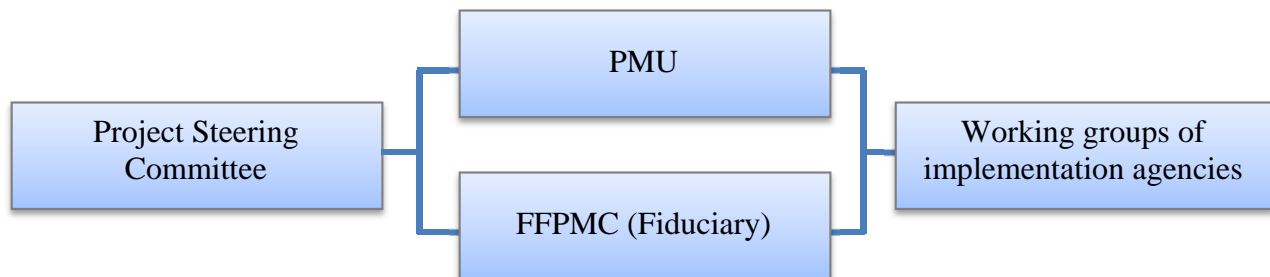
- **Component 2:** The new IEPI will be responsible for sub-component 2.1 (Services to Investors and Exporters), and sub-component 2.2 (Exporter Development Grants). A Grant Implementation Unit will be set up within the agency to manage the exporter development grants and a selection committee of private sector participants will be identified to oversee the selection process. The establishment of the IEPI including the hiring of key staff will be an effectiveness condition for this component. A draft grants implementation manual outlining objectives, eligibility requirements, selection criteria and process, as well as other pertinent procedural information has been prepared and will be finalized before disbursements for this component.

EIF will be responsible for the PPPs under sub-component 2.3 for approved proposals from the IT and Engineering industry while IEPI will be responsible for approved proposals from the other sectors. Two PPP managers (one based in EIF and another based in IEPI) will be hired to manage the PPPs.

Given the integral nature of IEPI to this component, the establishment of the agency, including the hiring of key staff is a disbursement condition for component 2. A draft PPP implementation manual outlining objectives, eligibility requirements, selection criteria and process, as well as other pertinent procedural information has been prepared and will be finalized before disbursements for this component.

- **Component 3:** The PMU at MoE will be responsible for the implementation of this component. The PMU will work with the representatives of the NIM, NAB and SARM to develop the ToRs and other technical inputs required for the implementation of the component.

**Annex Figure 2 Project Implementation Arrangements**



5. **The implementation arrangements under the proposed project will be governed by the guidelines and procedures set out in the Operational Manuals (OM).** Three manuals will

be developed under the project: a project operational manual and implementation manuals for the grants and PPPs. The MoE will develop the manuals, drawing from the lessons learned in the implementation of other similar projects in Armenia, and reflecting the financial management, procurement and reporting arrangements planned for the proposed project.

***Financial Management and Disbursement***

6. **The FM arrangements of FFPMC were reviewed and assessed as acceptable to the Bank for project implementation subject to agreed actions by the client as described hereafter.** The Project FM assessment undertaken in March-April 2014 confirmed that (i) internal control and filing systems in place are adequate (while the controls over exporter development grants and PPPs schemes need to be developed and described in the OMs); (ii) the FM staff at FFPMC has extensive experience in the Bank-financed project; and (iii) results from the latest annual audit of projects implemented by FFPMC were satisfactory.

7. **Draft implementation manuals for Exporter Development Grants (under Sub-Component 2.2) and PPPs for Increasing Investment and Export (under Sub-Component 2.3), describing the operations, implementation arrangements, fund flows and controls over them under Grants and PPPs schemes, have been developed.** The approval of final implementation manuals acceptable by the Bank, by the MOE would be a disbursement condition for exporter development grants and PPPs for increasing investment and export.

8. **Additional actions have been agreed to strengthen FM aspects.** While not an effectiveness condition, FFPMC will be expected to: (i) prior to the Project effectiveness develop the Project’s financial management manual (FMM) acceptable to the Bank to reflect specific activities, funds flow and controls under the Project (the controls and funds flow for exporter development grants and PPPs schemes would be described separately in the grants and PPPs’ operations manuals), and (ii) before the implementation of exporter development grants and PPPs schemes, hire a consultant to support the FM staff with the grants and PPS schemes (a capacity building action).

9. **The overall FM risk for the Project before mitigation measures is assessed as substantial.** After mitigation measures have taken place - the development and adoption of the Grants’ and PPPs’ OM - the FM risk is expected to be moderate.

10. **No significant weaknesses were identified at FFPMC.** The table below (Annex Table 2) reflects the actions agreed:

**Annex Table 2: Agreed Actions**

Agreed Actions	Due date
1. Finalize the Implementation Manuals for Exporter Development Grants (under Sub-Component 2.2) and PPPs for Increasing Investment and Export (under Sub-Component 2.3), acceptable to the Bank, and describing the implementation arrangements, fund flows and controls over them under Grants and PPPs schemes,	Disbursement condition: Final Implementation Manuals to be approved by the MoE

2. Develop the Project's Financial Management Manual ( <i>a capacity building action and not a condition</i> )	By Project Effectiveness
3. Hire a consultant to support the FM staff of FFPMC with the implementation of Grants and PPPs schemes.	Before the implementation of the Grants and PPPs schemes commences.

11. **The planning and budgeting of the RBF/DLI scheme under Component 1 will be implemented by Finance and Budgeting Department of the MOE following standard budget procedures, while for the rest of the components/activates under the Project the planning and the budgeting will be implemented by FFPMC.** Both MOE and FFPMC are capable of preparing relevant budgets. FFPMC utilizes the Armenian Software (AS) accounting software, used by a few Armenian project implementation units (PIUs) for quite a while and found to be adequate, which has advanced, flexible, and convenient report writing tool to generate reports in customized formats. For reporting purposes FFPMC follows cash basis IPSAS and applies former local accrual basis accounting standards (ASRA) for accounting. The chart of account used for ongoing projects can be adapted to be used for the Project.

12. **Both the MOE<sup>16</sup> and FFPMC have adequate staffing for the project implementation.** FFPMC's FM/accounting staff has strong knowledge and experience in the Bank FM policies and procedures.

13. **The internal controls at the FFPMC are found to be sound and capable of safeguarding assets, recording transactions, ensuring effectiveness and efficiency of operations, and providing reliable and timely information on projects.** Considering the small size of the FFPMC, no internal audit function exists nor is required; however the MoF's internal audit unit performs ad hoc supervision.

14. **FFPMC regularly (before each WA is prepared or at least once a quarter) will reconcile the project's accounting records with the WB disbursement data via the Client Connection system.** The project SOEs are extracted from the accounting software and are finalized in Excel spreadsheets by the financial manager, and reconciled by the chief accountant. The financial manager reviews the monthly bank statements, reconciles them to the project accounting records. A simplified SOE for the disbursements under the RBF/DLI schemes will be prepared by the MOE (the format was agreed with the Bank) and be validated by the auditor prior to disbursing the funds under RBF/DLI schemes.

15. **The responsibility for contract implementation is with the project managers at implementing agencies (i.e. the line ministries, government staff, parliament staff, chamber of control, tax service, etc.), who accept the deliverables under the contracts, as well as with FFPMC procurement specialists, who regularly monitor the specific deadlines for the contracts (such as contract closing dates, suspensions, delays, etc.).** The monitoring of the contract payment related data is conducted by the accounting staff. The paid invoices are

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<sup>16</sup> The MOE staff will only be involved with the planning, budgeting and reporting for RBF/DLI scheme under Component 1.



marked “paid” to prevent any possibility of double-payments. In addition to this procedure, the financial manager developed Excel spreadsheets that lists for each contract the amount of each invoice to be paid, as well as all the previous payments made. FFPMC is currently exploring the functionality of the new accounting software to incorporate the contract monitoring. The advance bank guarantee expiration dates are also monitored by the accountant. The payments are also verified by the financial manager before each payment is made.

**16. The internal controls exercised by the MoE during the budget preparation stage are adequate for the project implementation; however, it was observed that there are no controls in place at the MoE for verifying the actual expenditures incurred by the program implementing entities that are financed from the state budget funds.** There are several state owned entities being financed through the MoE, which are state owned Non Commercial Organizations, Foundations or Joint Stock Companies. While some of those entities (Foundations) are subject to statutory audit requirement and undergo annual audits and are regularly inspected by the MoF and Chamber of Control, the MoE has no direct control over the expenditures incurred by those entities and is not formally responsible for verifying the actual expenditures. The MoE’s internal audit unit which also conducts ad hoc supervisions is still in its development stage, and is staffed with only two internal auditors having Public Sector Internal Auditor qualification issued by the MoF. To mitigate the lack of the verification control over actual expenditures, it was agreed that prior making disbursements by the Bank under RBF/DLI schemes, the actual Eligible Expenditures made under RBF/DLI scheme under Component 1 will be validated by an independent auditor acceptable to the Bank. The validation will be conducted in accordance with the TOR agreed with the Bank.

**17. Project management-oriented consolidated semiannual IFRs will be used for the project monitoring and supervision.** The information on RBF/DLI scheme for the project consolidated IFR will be provided to FFPMC by MoE, while for the rest of the project components/activities, the information will be generated from the FFPMC accounting system. FFPMC will be responsible for consolidation of the IFRs. FFPMC has significant experience in IFR preparation, and the IFRs of active projects were always received on time and found to be in general acceptable to the Bank. The format of the IFRs has been confirmed during assessment and includes: (i) Project Sources and Uses of Funds; (ii) Uses of Funds by Project Activity; (iii) Designated Account Statements; (iv) A Statement of the Financial Position; and (v) SOE Withdrawal Schedule. FFPMC will be producing a full set of IFRs every calendar semester throughout the life of the project. These financial reports will be submitted to the Bank within 45 days of the end of each calendar semester. The first semester IFR will be submitted after the end of the first full semester following the initial disbursement.

**18. FFPMC’s current auditing arrangements are satisfactory to the Bank (there are no pending audits for the projects implemented by FFPMC and no major issues have arisen in the latest audit of active projects implemented by FFPMC), and it has thus been agreed that similar audit arrangements will be adopted for the Project, to cover the project financial statements.** The audit of the Project will be conducted: (i) by independent private auditors acceptable to the Bank, with TOR acceptable to the Bank and procured by the FFPMC; and (ii) according to the International Standards on Auditing (ISA) issued by the International Auditing and Assurance Standards Board of the International Federation of Accountants (IFAC).

19. **The sample audit TOR for the Project agreed with the Bank will be modified to reflect the validation by the auditor of the actual expenditures incurred under RBF/DLI scheme.** The annual audits of the project financial statements will be provided to the Bank within six months since the end of each fiscal year, also at the project closing. If the period from the date of effectiveness of the loan to the end of the Borrower’s fiscal year is no more than six months, the first audit report may cover financial statements for the period from effectiveness to the end of the second fiscal year. The Borrower has agreed to disclose the audit reports for the Project within one month of their receipt from the auditors and acceptance by the Bank, by posting the reports on its (www.ffpmc.am or www.mineconomy.am) web site. Following the Bank's formal receipt of these reports from the Borrower, the Bank will make them publicly available according to World Bank Policy on Access to Information. The cost of the audit will be financed from the proceeds of the project.

20. **The accounting staff of the FPPMC is well aware of the Bank’s disbursement procedures. FPPMC will establish a Designated Account (DA) specifically for this project, in State Treasury maintained by Central Bank of Armenia, which is holding almost all DAs for ongoing Armenian projects.** The DA will be used for the disbursement of the Bank funds for project components, except for RBF/DLI scheme (Component 1), for which the funds will be directly disbursed by the Bank to the State Budget.

21. **A set of DLIs has been established for Component 1, with a certain ceiling of specified amounts to be disbursed against each DLI (see Annex Table 3).** Disbursements for this component will be made against eligible expenditures which are the State Budget lines supporting the Project objectives and after the auditor’s validation of the actual amount of eligible expenditures. For the purposes of the project the EEP will consist of salaries of all relevant enterprise support and quality infrastructure agencies (the new IEPI, the new NTO, EIF, SMEDNC, NCFA, NIM, NAB, and SARM), trade representatives’ remuneration, staff of the MoE, and the Minister of Economy’s staff (see annex Table 4 for 2014 Salaries Budget). Since the EEPs consist solely of salaries there are no procurement or safeguards requirements. It is anticipated that the EEP expenditures will in all periods exceed the disbursements for the component. Disbursements will be conditioned on meeting DLIs - each defined by a carefully worded protocol in the period for which the disbursement is programmed. There will be 6 annual RBF payouts over the course of the loan as outlined in the DLI matrix. The payouts will occur by June each year based on EEP expenditure and DLI conditions met during the previous year. The funds in US\$ will flow directly from the Bank to the MOF’s Treasury’s US\$ account at the Central Bank of Armenia (CBA), and upon the deposit of those funds, the MoF’s Treasury Single Account (TSA) will be credited with the local currency equivalent at the official exchange rate, as reflected in the Law on State Budget.

**Annex Table 3 Planned DLI Disbursement Schedule<sup>17</sup>**

	June 2015	June 2016	June 2017	June 2018	June 2019	June 2020
<b>DLI 1</b>	125,000	-	-	-	-	
<b>DLI 2</b>	125,000	-	-	-	-	
<b>DLI 3</b>	125,000	-	-	-	-	

<sup>17</sup> Disbursements for DLIs are conditioned upon the amount of the actual amount of the EEP incurred by the government over the course of the project. DLI disbursements cannot exceed EEP.

<b>DLI 4</b>	125,000	100,000	100,000	100,000	100,000	50,000
<b>DLI 5</b>	150,000	200,000	200,000	200,000	200,000	75,000
<b>DLI 6</b>	150,000	300,000	300,000	300,000	200,000	50,000
<b>DLI 7</b>	100,000	200,000	200,000	200,000	200,000	75,000
<b>DLI 8</b>	150,000	300,000	300,000	300,000	300,000	50,000
<b>DLI 9</b>	100,000	300,000	300,000	300,000	200,000	50,000
<b>DLI 10</b>	-	-	-	-	100,000	
<b>DLI 11</b>	100,000	100,000	100,000	100,000	100,000	50,000
<b>DLI 12</b>	150,000	200,000	200,000	200,000	200,000	50,000
<b>DLI 13</b>	100,000	300,000	300,000	300,000	200,000	50,000
<b>DLI 14</b>	-	-	-	-	200,000	
<b>Annual Totals</b>	<b>1,500,000</b>	<b>2,000,000</b>	<b>2,000,000</b>	<b>2,000,000</b>	<b>2,000,000</b>	<b>500,000</b>

**Annex Table 4: Eligible Expenditures<sup>18</sup>**

<b>Budget codes</b>	<b>Institutions</b>	<b>2014 Salaries Budget (US\$)</b>
04.01.01.11	IDF	234,373
04.01.01.04	Trade representatives	142,032
04.01.01.07	SME DNC	373,880
01.03.02.03	EIF	14,268
01.04.01.03, 04.01.01.14	Metrology (NIM)	144,648
04.01.01.03, 04.01.01.14	Standards (SARM)	63,657
04.01.01.08	NCFA	354,002
04.01.01.10	Accreditation (NAB)	34,210
04.01.01.06	Armenia Development Agency (ADA)	289,173
04.01.01.02	Ministry of Economy Staff	456,233
01.01.01.04	Staff of the Minister of Economy	174,862
	<b>Total</b>	<b>2,281,339</b>

Source: State Budget

22. **Project funds (for components/activities other than those under RBF/DLI scheme) will flow from the Bank**, either: (i) via the DA to be maintained in the Treasury, which will be replenished on the basis of SOEs or full documentation; or (ii) on the basis of direct payment withdrawal applications and/or special commitments, received from the FFPMC. The government funding will be made via the Treasury through normal budget allocation procedures initiated by the implementing agency in accordance with standard treasury and budget execution regulations. Withdrawal applications documenting funds utilized from the DA will be sent to the Bank at least every three months. For RBF/DLI scheme (under Component 1) the Reimbursement Method of Disbursement will be used. The disbursements under RBF/DLI scheme will be made based on simplified SOEs, which will indicate the eligible expenditures actually incurred, and validated by an independent auditor. The format of the simplified SOE has been agreed with the Bank. For other components/activities under the Project the following

<sup>18</sup> Eligible Expenditures will also include the salaries for the yet to be established IEPI and NTO.

disbursement methods may be used: Reimbursement, Advance, Direct payment and Special Commitment.

23. **The DA ceiling has been established at US\$2,500,000 as reflected in the Disbursement Letter.** Detailed instructions on withdrawal of the loan proceeds are provided in the Disbursement Letter. The fund flows and controls over them for Exporter Development Grants and PPPs for Increasing Investment and Export would be described in the OMs for Grants and PPPs schemes, acceptable to the Bank.

### *Procurement*

24. **Procurement under the project will be carried out by the Foreign Financing Projects Management Center (FFPMC) at the Ministry of Finance.** FFPMC will ensure that the procurement of Goods, Civil Works and Consultant Services will be carried out following the World Bank's Guidelines: Procurement of Goods, Works, and Non-Consulting Services Under IBRD Loans and IDA Credits & Grants by World Bank Borrowers (January 2011) and Guidelines Selection and Employment of Consultants Under IBRD Loans and IDA Credits & Grants by World Bank Borrowers (January 2011). The World Bank Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credit and Grants dated October 15, 2006 and revised on January 2011, would also apply.

25. **The latest version of the Bank's Standard Bidding Documents (SBD) for all ICBs, NCBs, Shopping and SRFPs available on the Bank's web site will be used.** The implementation arrangements will be described in the Operational Manual (OM) for the project that will be prepared by the Implementing Agency and submitted for the Bank's review and approval.

26. **The various items to be procured under different expenditure categories are described in detail below.** For each contract to be financed out of the Loan, the procurement methods or consultant selection methods, estimated costs, prior review requirements, and time frame agreed with the Bank are specified in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. The Procurement Plan will be published in line with the requirements in the Procurement and Consultants Guidelines. There is no procurement activity under Component 1 which is under Results-Based Financing (RBF). Implementation of the exporter development grants and PPPs under Components 2.2 and 2.3, respectively, are going to be procured in accordance with the rules and procedures in the relevant Grant Manual that will be prepared by the implementing agency. Approval by the Bank of the relevant manuals are disbursement conditions.

- Goods to be procured under the Project include ICB packages for procurement of equipment and furniture for industrial metrology building and laboratories and shopping packages for procurement of IT equipment and furniture for NAB.
- Civil Works include NCB packages for renovation of industrial metrology building and laboratories and refurbishment of NAB offices.
- A variety of Consultant Services is required for Components 2, 3 and 4.

27. **The FPPMC has prepared the Procurement Plan for the entire project, where procurement and review methods for the items to be procured under the project are presented.** The Procurement Plan has been posted on the World Bank's web site following completion of the negotiations. The General Procurement Notice (GPN) will be published in the UN Development Business by loan approval.

28. **Thresholds for Procurement Methods are the followings:**

(a) **Civil Works:** Works estimated to cost US\$5.0 million or more will be procured through International Competitive Bidding (ICB). Works estimated to cost less than US\$5.0 million and more than US\$200,000 will be procured through National Competitive Bidding (NCB). Works estimated to cost less than US\$200,000 each may be procured through Shopping on the basis of comparison of three written quotations obtained from the qualified construction companies.

(b) **Goods:** Goods estimated to cost US\$1.0 million or more will be procured through International Competitive Bidding (ICB). Goods estimated to cost less than US\$1.0 million and more than US\$100,000 will be procured through National Competitive Bidding (NCB). Readily available off-the-shelf goods estimated to cost less than US\$100,000 each may be procured through Shopping on the basis of comparison of three written quotations obtained from the qualified suppliers.

(c) **Consultant Services:** Consultancy services to be provided by consultancy firms may be procured through Quality and Cost Based Selection (QCBS); Quality Based Selection (QBS), Fixed Budget Selection (FBS), Least-Cost Selection; Consultant Qualification based Selection (CQS) and Single Source selection. For assignments estimated to cost less than US\$300,000 each, the shortlist may comprise only national firms according to the paragraph 2.7 of the Consultant Guidelines. Individual Consultants will be selected in accordance with Section V of the Consultant Guidelines.

29. **The latest versions of the Bank's Standard RFP and SBD available on the Bank's web site will be used for procurement of goods and works and selection of Consultants.**

30. **Prior Review thresholds are proposed as follows:**

(a) Goods - all ICB contracts; NCB contracts estimated to US\$500,000 or more;

(b) Works - all ICB contracts;

(c) All DC contracts for Goods and Works estimated to US\$50,000 or more;

(d) Contracts with consulting firms estimated to cost US\$200,000 or more and all Single Source contracts estimated to US\$2,000 and more;

(e) Contracts with Individual Consultants estimated at US\$100,000 or more and Single Source contracts under exceptional circumstances (e.g., key positions, long term consultants).

*Environmental and Social (including safeguards)*

31. **The Project will finance the rehabilitation of premises for the NIM and the NAB, and may finance additional civil works under the PPP projects in sub-component 2.3.** Because the Project carries a physical investment component involving reconstruction of buildings and has the potential for new construction, the location and scale of which is not yet known, OP/BP 4.01 Environmental Assessment and OP/BP 4.12 on Involuntary Resettlement have been triggered. The envisaged civil works will have modest local environmental and social impacts, which would be easy to mitigate by ensuring that works providers adhere to the conventional good construction and environmental practices. Therefore, the Project is classified as environmental Category B.

32. **Because the designs of the majority of site-specific investments are not available at this stage, an Environmental and Social Management Framework (ESMF) was developed to guide environmental and social screening, classification, review, management planning, and monitoring of civil works under the Project.** These works are already known to be pretty similar and to carry a common set of environmental and social risks. One site-specific EMP for rehabilitation works in NIM building is also produced, as the detailed design of this sub-project is already prepared. A Resettlement Policy Framework (RPF) was also prepared to provide a framework for land use or acquisition under the project. It provides detailed guidance for developing investment-specific Resettlement Action Plans (RAPs), to be worked out and implemented prior to commencement of works at a site where resettlement or land use/acquisition will be required. Activities related to the production of arms, tobacco, and hazardous substances will not be eligible for financing from this Facility. The negative list of activities ineligible for financing from these activities will be included into the POM and the Grants implementation and PPP implementation manuals.

33. **The draft ESMF, EMP and RPF were disclosed through the web site of the MoE, and opened for public feedback via electronic commenting.** A public consultation with relevant stakeholders was conducted on all three documents. The finalized EMSF, EMP and RPF were then re-disclosed in country and through the Bank's InfoShop. EMPs for the rehabilitation of NAB's premises, for the physical works that may be financed as part of PPP arrangements under sub-component 2.3 will be subject to similar safeguard procedures: these sub-projects will be screened to ensure that they fall under environmental Category B; a need for involuntary resettlement will be identified and RAPs developed and implemented if required; and EMP will be drafted, disclosed, and consulted upon with the affected people. EMPs will be included into the tender packages and will be attached to the civil works contracts, so that their implementation is made mandatory for the works provider. RAPs, if required, will be disclosed, discussed with the affected people, finalized, and implemented to the Bank's satisfaction before construction can begin on a site where resettlement is taking place.

34. **The project includes the planned restructuring of the NIM (under sub-component 1.2 - Improving the Effectiveness of the National Quality Infrastructure System).** The restructuring process could entail the possibility of retrenchment of some staff in this entity. For this reason, good practices related to retrenchment would be followed. All related policies and procedures will be detailed in the POM. Efforts will be made to minimize the retrenchment levels by considering alternatives including redeployment of employees to other government

agencies. Analysis of potential social and economic impacts and identification of any particular social group of employees or geographic area of concentration will be conducted and findings of the analysis will be addressed. A retrenchment plan will be developed which will include severance packages agreed with relevant unions or employee association and will cover:

- (i) Development of a communications strategy including timely stakeholder consultations with workers and their representatives;
- (ii) Development of a fair and transparent process to ensure that the selection of workers for dismissal is based on objective principles;
- (iii) Deployment of a grievance redress mechanism;
- (iv) Livelihood alternative complimentary support which will include retraining, counseling, job placement support and apprenticeship.

35. **The Ministry will create a Project Management Unit (PMU) that will be responsible for day-to-day management of project activities including safeguards compliance (while financial management will be provided by the FFPMC, as is customary for projects supported by the World Bank in Armenia).** The MoE has had no previous exposure to World Bank safeguard policies or experience overseeing a Category B project. Therefore, the PMU will build its institutional capacity related to safeguards oversight by designating/retaining a person with adequate skills for managing environmental and social aspects of the project interventions. The project will fund a Social and Environmental Specialist to be resident at the PMU. This person will work closely with the safeguards specialists of the Bank team and receive guidance for handling safeguards issues under the project, as well as wider sustainability, gender and grievance redress issues. Institutional arrangements for handling safeguards will be in place within the PMU prior to project effectiveness and shall be maintained through the project life.

### *Monitoring & Evaluation*

36. **The PDO level and intermediate results indicators will be monitored using the following sources and methodologies:**

- Regular data collection process;
- Baseline and follow-up surveys; and
- Reports prepared by the MoE and the implementing agencies.

37. **The project manager at the MoE will be responsible for bringing together the reports and representatives of the agencies for monitoring of the PDO and results, and communicating with the World Bank.** M&E under the project would be integrated into regular monitoring functions of the ministry. Additionally, a consulting company will be hired to conduct regular surveys and collect required data on results indicators. DLIs have been selected on the basis of the data requirements already planned as part of the ministry's regular data collection process. Gender disaggregated data will be gathered under the project as relevant.

38. **Under the proposed project, efforts will be directed at gradually building up the Ministry's capacity to plan, monitor and evaluate policy.** These key areas of management need to be mainstreamed and institutionalized in the ministry. Some of its departments appear to be already involved in some aspects of policy planning and monitoring. These departments could be strengthened through capacity building, training and technical assistance to assume a stronger role in management and coordinating functions associated with policy, planning, monitoring and evaluation.



**Annex 5: Operational Risk Assessment Framework (ORAF)**

**Operational Risk Assessment Framework (ORAF)**

**Armenia: Trade Promotion and Quality Infrastructure (P146994)**

**Stage: Board**

<b>Stakeholder Risk</b>	Rating	Moderate				
<p><b>Risk Description:</b></p> <p>Some reforms are required, for which the government may encounter some resistance from within. Component 1 includes complex reforms, which will require engagement and coordination with several stakeholders within the government.</p>	<b>Risk Management:</b>					
	<p>The government has shown significant commitment to project implementation. While the potential for political interference to delay project implementation remains, adequate mitigation measures have been incorporated into the project. The government's commitment is reflected in a letter sent to the World Bank (Annex 1) stating its intention to proceed with the major restructuring of the enterprise support and quality infrastructure agencies by loan effectiveness. Furthermore, the results based component aligns incentives of various segments of the government and signals the government's willingness to stake its resources and reputation (targets, prices and results will be published on the government website) on meeting agreed targets essential for facilitating investment and export led growth.</p>					
	Resp: Client	Status: Not yet due	Stage: Implementation	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency Cont: inuous
<b>Implementing Agency (IA) Risks (including Fiduciary Risks)</b>						
<b>Capacity</b>	Rating	Substantial				
<p><b>Risk Description:</b></p> <p>1. There are multiple agencies engaged in administering the project (PMU in MoE, EIF and Investment agency) and this increases the complexity of the project.</p> <p>2. The project includes several components that require specialized skills including the Matching grants, PPPs and metrology renovations.</p> <p>3. Foreign Financing Projects Management Center (FFPMC) which will be responsible for fiduciary arrangements will need to</p>	<b>Risk Management:</b>					
	<p>The role of the MoE as the coordinating PMU reduces the potential delays given the multiple agencies involved in implementation. The MoE is responsible for coordinating all the stakeholder agencies and has the case has been throughout preparation, should be able to work with the different groups seamlessly to support the project.</p>					
	Resp: Client	Status: In Progress	Stage: Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency Year: ly
	<b>Risk Management:</b>					
	<p>The project will fund international resident advisors to support the agencies in the implementation of the project components. EIF has extensive experience with PPPs and grants and is well versed to support those components. The operational manuals (OMs) for the project, grants and PPPs acceptable</p>					

build capacity to manage the DLI disbursements and the fund flows for the grants and PPP program.	to the Bank were drafted by Negotiations stage to ensure all the implementation issues are addressed. Final versions of the OMs are required as a disbursement condition for the related components.					
	Resp: Client	Status: In Progress	Stage: Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency Yearly
	<b>Risk Management:</b> FFPMC has key staff with experience in administering donor funded projects and a satisfactory track record in procurement and FM in general. Additional financial management and procurement specialists will be hired to support the project.					
	Resp: Client	Status: Not Yet Due	Stage: Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency Yearly
<b>Governance</b>	Rating	Moderate				
Risk Description: Final budget decisions for the agencies lies with the Ministry of Finance which could decide to reduce funding to the agencies which would negatively impact the project	<b>Risk Management:</b> The results based component places strong emphasis on budgeting for the relevant agencies and therefore aligns the incentives of the Ministry of Finance and the MoE					
	Resp: Client	Status: In Progress	Stage: Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency Yearly
<b>Project Risks</b>						
<b>Design</b>	Rating	Substantial				
Risk Description:  1. The results based approach is new to the MoE and the non-achievement of DLIs could compromise disbursement.  2. There is the risk of low uptake from industry on the grants and PPP investments.	<b>Risk Management:</b> The DLIs have been developed over the course of extensive consultations with the government and there is significant commitment on the part of the government. The government has stated that it will implement the most difficult activities related to the restructuring before project effectiveness. The government's experience with the World Bank-financed Disease Prevention and Control Project, which includes a \$4.3 million performance based component, provides some familiarity with results based financing.					
	Resp: Client	Status: In Progress	Stage: Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency Quarterly
	<b>Risk Management:</b> There will be a comprehensive communications strategy to ensure awareness of the program and in fact					

	awareness was initiated during project preparation through the extensive consultations with industry and the survey commissioned. The two-step process for the matching grants is designed to minimize the administrative burden on the part of firms and increase the quality of applications. The survey consultations revealed strong interest in the program. Representatives of several local industries have indicated an interest in these PPPs and already have identified potential collaborative projects specific to their industries.					
	Resp: Client	Status: In Progress	Stage: Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency Quarterly
<b>Social and Environmental</b>	Rating	Low				
<b>Risk Description:</b> 1. The PMU does not have experience with oversight of social and environmental safeguards issues. 2. Civil works supported by the project may cause negative social and environmental impacts.	<b>Risk Management:</b>					
	The MoE will create a PMU comprised of the Ministry's core staff and hired consultants, which will be responsible for all the day-to-day management of the project activities including safeguards oversight. The PMU will include an Environmental and Social Specialist with adequate background and skills for safeguards management. Institutional arrangements for handling safeguards will be in place within the PMU prior to project effectiveness and shall be maintained through the project life. Also, the PMU will hire a consultant company for the provision of general technical supervision of works, and will include environmental and social monitoring functions into the terms of reference of the supervision company.					
	Resp: Client	Status: In Progress	Stage: Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency Continuous
	<b>Risk Management:</b>					
To address environmental and social risks of civil works, the Borrower prepared an Environmental and Social Management Framework (ESMF) and a Resettlement Plan Framework (PRF) for the project. Site-specific Environmental Management Plans (EMPs) and Resettlement Action Plans, if required, will be developed for each sub-project, will be shared with the Bank, disclosed, and discussed with project affected people prior to commencement of works at each site.						
	Resp: Client	Status: In Progress	Stage: Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency
<b>Program and Donor</b>	Rating	Low				
<b>Risk Description:</b> The areas supported by the project have related donor programs and an integrated,	<b>Risk Management:</b>					
	The team has engaged in extensive consultations with donors throughout project preparation and is working with donors to ensure activities are complimentary.					

coordinated approach will help achieve better outcomes	Resp: Both	Status: In Progress	Stage: Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency Yearly
<b>Delivery Monitoring and Sustainability</b>	Rating	Moderate				
<p>Risk Description:</p> <p>There is a risk of weak monitoring and evaluation due to low capacity and the multitude of stakeholders and agencies involved.</p>	<p><b>Risk Management:</b></p> <p>The project includes a robust M&amp;E framework to enable decision makers to track performance, adjust implementation as needed, and demonstrate the impact of activities financed by the Project. The PDO level, intermediate results indicators, and DLIs will be monitored through regular data collection process; baseline and follow-up surveys; and reports prepared by the MoE, and the stakeholder agencies. An M&amp;E specialist will be hired within the PMU will have primary responsibility for establishing and managing the M&amp;E system including data collection, compilation and reporting from various agencies and preparation of M&amp;E reports for the project. The PMU will carry out its own assessment at various stages of the project implementation, and consolidate the findings in an Annual Report. A comprehensive evaluation report will be provided by the PMU at project completion. The PMU will also organize periodic workshops inviting key project stakeholders to discuss and consolidate their views and findings for the preparation of the Annual Reports and the final evaluation report.</p>					
6. Overall Risk	Resp: Client	Status: Not Yet Due	Stage: Implementation	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency Yearly
<b>Overall Implementation Risk: Substantial</b>						
<p>Risk Description:</p> <p>Implementation risk is rated as Substantial based on the innovativeness of the project and the complexity of the project implementation arrangements.</p>						

**Annex 6: Implementation Support Plan**  
**Armenia: Trade Promotion and Quality Infrastructure Project**

**Strategy and Approach for Implementation Support**

1. **The implementation support strategy for the proposed Project would include regular dialogue with the Government, joint review of the project implementation and regular exercise of fiduciary oversight throughout implementation.**

- a. ***Regular dialogue with the Government*** would facilitate early identification of problems and obstacles that could delay implementation. It would enable the timely provision of technical advice and support to remove such obstacles. This would help to identify issues as they emerge and address them through advice and support in an expeditious manner, without waiting for joint reviews.
- b. ***Joint reviews*** would take place twice a year, aimed at examining the progress in achieving agreed targets and results. The Bank Task Team would participate in the reviews with representatives of the GoA. During each review, the type of implementation support that is needed would be identified, followed by joint decisions on necessary assistance.
- c. ***Fiduciary oversight*** would enable the Bank to fulfill its fiduciary obligations and ensure compliance with its fiduciary standards through the ongoing supervision of the Project's financial management and procurement arrangements and results.
  - i. ***Financial management.*** The Bank will conduct risk-based financial management implementation support and supervisions within a year from the project effectiveness, and then at appropriate intervals. During the Project implementation, the Bank will supervise the project's financial management arrangements in the following ways: (a) review the project's semi-annual IFRs as well as the Project's annual audited financial statements and auditor's management letters and remedial actions recommended in the auditor's management letters; and (b) during the Bank's on-site missions, review the following key areas: (i) project accounting and internal control systems; (ii) budgeting and financial planning arrangements; (iii) disbursement arrangements and financial flows, including counterpart funds, as applicable; and (iv) any incidents of corrupt practices involving project resources. As required, a Bank-accredited Financial Management Specialist will participate in the implementation support and supervision process.
  - ii. ***Oversight on procurement*** will be provided through prior reviews in accordance with the procurement thresholds. Supervision will be carried out twice a year, through both desk and on-site reviews of procurement arrangements and results, including post review of contracts selected in a random manner. As needed, on-site training on procurement may be provided upon request to the ministry or FPPMC staff.

## Implementation Support Plan

2. The table below reflects the implementation support plan for the proposed Project.

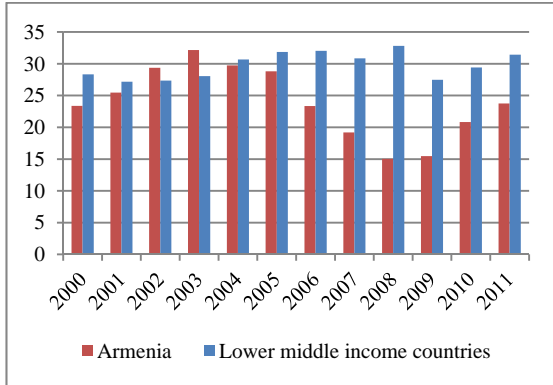
Time	Focus	Skills Needed	Resource Estimate per year	Partner Role
First 12 months	Technical and operational support in: (i) streamlining business support agencies; (ii) results based lending implementation; (iii) M&E; and (iv) overall implementation	Private Sector Specialist (TTL)	10 weeks	Participation in joint reviews
	Technical support in Investment Promotion and Export Promotion programs	Investment Promotion Expert	8 weeks	
	Technical support in: (i) capacity building for NMI staff and renovation of Industrial Metrology Laboratory; (ii) Capacity building of NAB staff Refurbishment of NAB offices	Quality Infrastructure Expert	8 weeks	
		Civil Engineers	8 weeks	
	Technical support in: (i) Exporter Development Grants; and (ii) Public Private Partnerships	Trade and Investment Expert PPP expert	8 weeks 8 weeks	
	Technical and operational support	Private and Financial Development Specialist	10 weeks	
	Financial management support	Financial Management Specialist	5 weeks	
	Procurement support	Procurement Specialist	4 weeks	
13 <sup>th</sup> – 72nd month	Technical and operational support in: (i) streamlining business support agencies; (ii) results based lending implementation; (iii) M&E; and (iv) overall implementation	Senior Private Sector Specialist (TTL)	12 weeks	Participation in joint reviews
	Technical support in Investment Promotion and Export Promotion programs	Investment Promotion Expert	8 weeks	
	Technical support in: (i) capacity building for NMI staff and renovation of Industrial Metrology Laboratory; (ii) Capacity building of NAB staff Refurbishment of NAB offices	Quality Infrastructure Expert	8 weeks	
		Civil Engineers	8 weeks	
	Technical support in: (i) Exporter Development Grants; and (ii) Public Private Partnerships	Trade and Investment Expert PPP expert	8 weeks 8 weeks	
	Technical and operational support	Private and Financial Development Specialist	10 weeks	
	Financial management support	Financial Management Specialist	5 weeks	
	Procurement support	Procurement Specialist	4 weeks	
Environmental support	Environmental Specialist	4 weeks		

## Annex 7: Detailed Sectoral and Institutional Context

### Trade Competitiveness Assessment

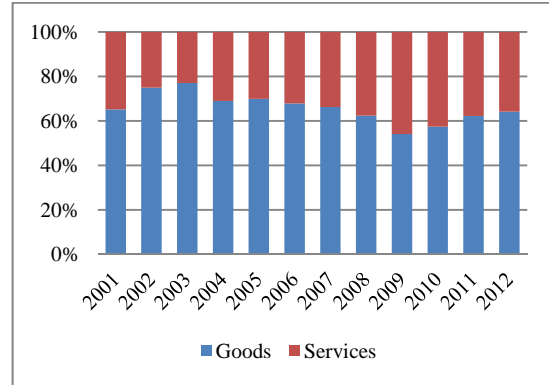
1. **Armenia has historically had a relatively low export base, a situation that was exacerbated in the period before the financial crisis.** In 2008, the exports-to-GDP ratio reached a low of 15 percent, less than half of the average for lower middle income countries (Annex Figure 3) as other sectors of the economy (primarily construction) heated up. By 2012, the export to GDP ratio had risen to 25 percent as a result of product exports rebounding above pre-crisis levels due to increase in commodity prices and demand for agriculture products. The export basket in 2012 consists of 64 percent of products and 36 percent of services (Annex Figure 4). Russia (21.3 percent of total exports in 2012) is the largest trade partner for Armenia, followed by Bulgaria (10.3 percent), Belgium (8.5 percent), Germany (8.2 percent), Iran (7.2 percent), and USA (6.8 percent).

Annex Figure 1: Export of Goods and Services (percent of GDP)



Source: World Development Indicators

Annex Figure 2: Composition of Export Basket (Goods and Services)

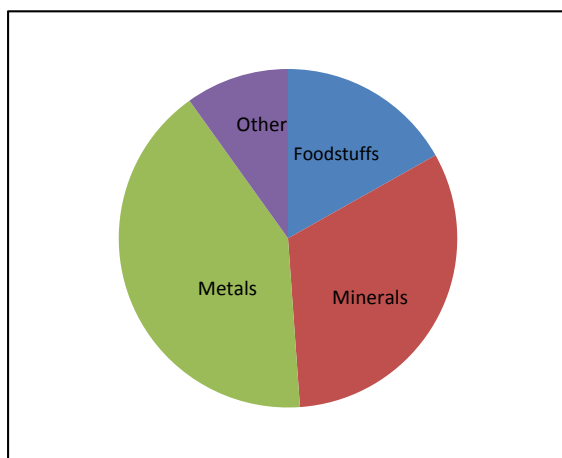


Source: World Development Indicators

2. **The dominant export sectors for products and services have remained constant for almost a decade.** The three sectors that dominate the goods export basket in 2012, namely foodstuffs, metals, and minerals, are the same sectors that dominated the export basket a decade ago (Annex Figure 5). The combined share of total goods exports accounted by these three sectors remains stable (88.7 percent in 2012 vs. 90.2 percent in 2002), although their relative importance has changed over the last decade. While metal products were the dominant export sector in 2002 accounting for 65.2 percent of total exports, its relative importance had declined to 38 percent by 2012. Conversely, both the foodstuff and mineral sectors increased their share of total exports from 14 to 20 percent and from 11 to 30.6 percent, respectively. The top products include copper ores, spirits, ferro molybdenum, unrefined copper, electrical energy, aluminum foil and diamonds. The majority of agricultural exports are shipped to nearby countries like Russia, Georgia, Iraq and Ukraine; while non-agricultural products are shipped predominantly to EU countries including Bulgaria, Belgium, Germany, and the Netherlands. Armenia's services exports consists predominantly of travel (56.5 percent of service exports in 2012) and transportation (22.2 percent) a composition that has remained relatively consistent (Annex Figure 6). The ICT sector has been growing in importance at 8.2 percent of service exports in 2012. All three sectors were temporarily impacted by the crisis but quickly rebounded past pre-crisis

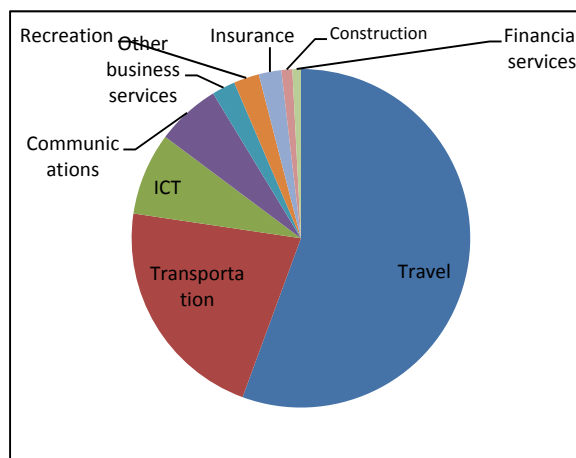
levels. Between 2009 and 2012, the travel sector grew by 7.8 percent, transportation by 13 percent and ICT by 10.9 percent.

**Annex Figure 3: Sectoral Composition of Goods Exported (average 2010-12)**



Source: World Development Indicators

**Annex Figure 4: Armenia's Services Exports (average 2010-2012)**

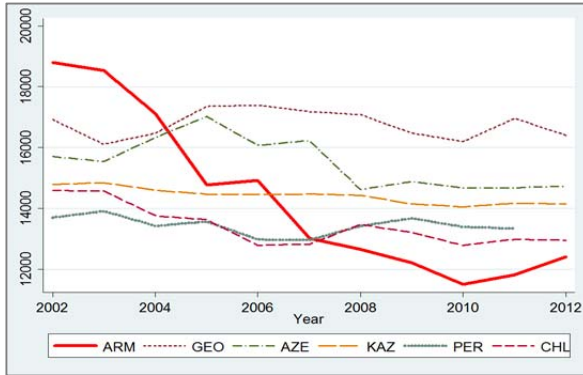


Source: World Development Indicators

**3. The sophistication of Armenia's export products has declined significantly over the years.** Armenia went from having the most sophisticated export basket in the region to the least sophisticated over the past decade (Annex Figure 7) as the technological content decreased (Annex Figure 8). Further analysis reveals that a major factor behind this dynamic was the sharp drop in the share of diamond exports (which decreased from more than 40 percent in 2002 to only 4 percent of exports in 2012) and the surge in the share of commodities, including minerals ores, ferro-molybdenum, and copper. For a small country like Armenia that cannot compete on scale and must compete on quality, this is an ominous trend. Left unchanged, the structure of Armenia's export basket will do little to mitigate Armenia's vulnerability to global competition and will confine the country to a lower growth trajectory. Upgrading of Armenia's export basket will be limited without a significant push towards its diversification by supporting companies in non-dominant sectors that will help improve their potential to export by enhancing the complexity and quality of their products. Studies show that countries promoting exports of more "sophisticated" products grow faster (Hausmann, Hwang and Rodrik 2006); and therefore, introducing measures that support export upgrading, should be a key policy priority.

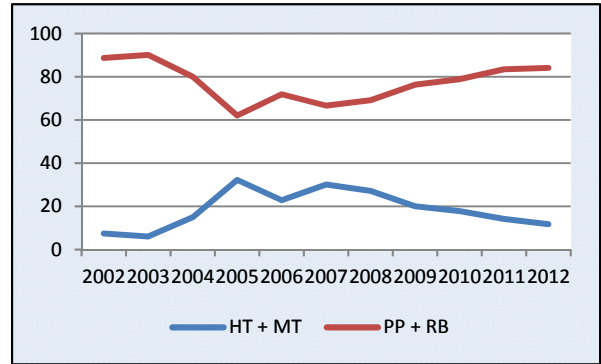


**Annex Figure 5: Export Sophistication (EXPY)**



Source: WB staff calculations - UN-COMTRADE data

**Annex Figure 6: Technological Classification of Exports from Armenia**

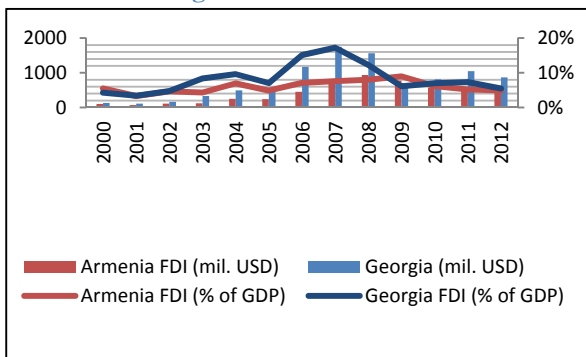


HT + MT = High & medium technology products  
PP + RB = Primary & Resource-based products

Source: WB staff calculations – UN COMTRADE

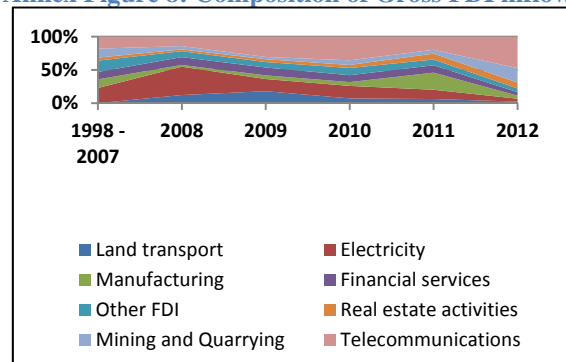
**4. While foreign ownership is a key driver of export growth, the quantum of FDI arriving into Armenia has been stagnating in recent years.** A study of transition economies in Central & Eastern Europe<sup>19</sup> illustrated that FDI is a strong vehicle for growth and integration into the global economy. Russia and France are the largest sources of FDI for Armenia accounting for 44 percent and 25 percent of the country’s FDI inflows between 2009 and 2010 with telecommunications, mining and real estate being the major sectors to attract FDI (Annex Figure 10). Since the financial crisis, the inflow of FDI to the South-Caucasus region increased by 26 percent from 2009-2011, however, Armenia showed a steady decrease from US\$778 million in 2009 to US\$489 million in 2012 (Annex Figure 9) as investments in financial services and electricity declined. FDI inflows are much lower than in neighboring Georgia (33 percent less for the period 2009-11, 45 percent less in 2012) and significantly less than in all the new EU member states. While there appears to be renewed interest in telecommunications, mining and real estate, Armenia must re-assess its approach to attracting FDI and Investment policy reforms will need to be a cornerstone of this assessment.

**Annex Figure 7: Armenia Inward FDI**



Source: UNCTAD

**Annex Figure 8: Composition of Gross FDI inflows**



Source: Armenian National Statistical Service

<sup>19</sup> Golden Growth: Restoring the Lustre of the European economic model, World Bank 2012

### *From low export base to export-led growth*

**5. Recognizing the dire state of the Armenian export basket, the government developed the Export-Led Industrial policy to facilitate the improvement of the global competitiveness of Armenian firms.** The main objectives of the policy included:

- *Cooperation with the private sector to devise strategies to enhance the competitiveness of firms with export potential;*
- *Attracting multinational corporations;*
- *Improving the business environment;*
- *Modernizing enabling infrastructure (including logistics, education and national quality infrastructure); and*
- *Building the capacity of the enterprise support enterprise agencies*

**6. The government subsequently established industry-specific sector boards as a platform for Public-Private-Dialogue.** Given the limitation of resources, the government took a selective approach by identifying priority sectors determined based on: (i) their potential for export diversification; and (ii) opportunities for cluster development.<sup>20</sup> The sector boards comprised of key stakeholders including businesses, industry unions, professional associations, educational and research organizations. From 2012-13, the sector boards prepared sectoral assessments with detailed action plans for a number of the priority industries with the support of the World Bank<sup>21</sup>. The sectoral assessments highlighted a number of sector specific challenges and revealed regulatory reforms and investments in public goods and services that would strengthen industry clusters and improve the export potential of firms (see Annex 7 for more details on the sector specific action plans). The major areas of support identified included: (i) promotion of sales and market research on foreign markets, (ii) development and strengthening of industry clusters, (iii) industry-academia collaboration, and (ii) modernization of quality infrastructure (laboratories, standards).

**7. The sector boards initiated increasing industry coordination, a positive development that needs to be encouraged.** While physical clusters<sup>22</sup> do exist in some industries, prior to the sector boards, there was little communication within sectors in most industries. However several industry associations have been set up as a result of the sector boards. While the level of cooperation varies widely per sector and industry-academia collaboration remains very weak, things are moving in the right direction. Enterprises participating in the survey commissioned

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<sup>20</sup> Priority industries were divided into: a) those with relatively high export volumes over the past few years and with the potential to scale up (diamond cutting, gold jewelry, watch making, brandy and textile), b) industries that had experienced high growth over the past few years with potential for accelerated growth (pharmaceuticals, preserve production, wine, mineral water and juice); and c) industries identified as new drivers for growth (precision engineering).

<sup>21</sup> Funding for the preparation of the sectoral strategies was provided by the Export-led Industrial Development Strategy Implementation Support TA (P145530) funded by the World Bank Multi Donor Fund for Trade and Development

<sup>22</sup> Porter, 1998 defined clusters as geographic concentrations of interconnected businesses, suppliers, service providers, intermediaries and academic institutions

during the preparation of the project expressed interest in opportunities for horizontal cooperation within the industry to reduce their operational costs and increase their productivity. Recent studies point to significant evidence on cluster-driven growth<sup>23</sup>. Industries participating in a strong cluster with complementary economic activities report higher employment growth and improved competitiveness. Cluster formation reduces the barriers SMEs face due to their internal capability limitation through stronger linkages with larger firms and facilitates industry-academia collaboration. The development and upgrading of clusters is an important agenda for governments and is of particular importance in Armenia given the inherent impediments the country faces.

**8. Presently, Armenia receives a preponderance of market-seeking FDI with minimal impact on exports and has only been able to attract efficiency-seeking FDI in a few sectors most notably ICT.** The FDI entering Armenia over the past five years has been mostly been market-seeking (telecommunication, real estate and financial services and electricity) which has limited impact on the country's export base. The resource-seeking FDI (mining) is directly related to exports but leaves the country vulnerable to commodity price swings. In contrast, efficiency-seeking investors, such as the high tech multinationals that conduct R&D in the country are primarily interested in leveraging factor market efficiencies with a view to export. An increase in efficiency-seeking FDI is the key to sustainable FDI expansion in Armenia.

**9. Armenia has been able to attract a few multinationals in the high tech sector to conduct high-end specialized R&D in the country.** Armenia's competitive advantage in the sector stems from its (i) tradition of university programs specializing in science and engineering, (ii) competitive labor markets, (iii) low operating costs, and, (iv) support from a diaspora with a strong presence in Silicon Valley. While still a small segment of the economy (the IT sector is 2 percent of GDP and 8 percent of service exports), these multinationals have had a significant impact on the Armenian economy by providing high value added jobs in software design (with a significant 35 percent of jobs going to women), semiconductor chip design, website design and mobile applications development. The industry has also facilitated the creation on startups and spinoffs which export most of their services.

**10. The government can play a pivotal role in accelerating the level of efficiency-seeking FDI.** Discussions with existing multinationals reveal a pattern of phased commitment in Armenia: (i) starting with limited engagements, such as outsourcing projects to Armenian IT firms and/or university scientists, and (ii) increasing the level of engagement by facilitating development of innovation centers in collaboration with the government, academia and donors to support IT startups still in an outsourcing mode, before (iii) making the commitment to develop an R&D center and hire employees in the country. By supporting the innovation centers, the government has spearheaded the growth of the IT sector and strengthened linkages between domestic IT firms and the global IT multinationals. To attract new investments in the IT sector and others the government will need to continue with this model of engagement that works. Furthermore, it is of utmost importance that the government: i) support the development of an image building and marketing campaign to enhance the global view of Armenia and inform potential investors of the country's success stories; and (ii) develop the capabilities to fully support existing investors (in Armenia as in many countries over 50 percent of new FDI comes

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<sup>23</sup> Clusters, Convergence, and Economic Performance, Delgado, Porter, Stern, March 2011.

from existing investors).

**11. A simple and transparent legislative framework is an important prerequisite for attracting investment.** The GoA has already commenced a review of the Law on Foreign Investments, 1994 and its subordinate laws and regulations. The parts of the legislation dealing with investment entry and protection, investment incentives, and the institutions responsible for the implementation of investment policy are the most pertinent. Armenia has bilateral agreements for investment and mutual protection with 39 countries and is negotiating with more than twenty other states which provides additional guarantees to foreign investors. There needs to be some consistency between Armenia's international obligations towards investors and its domestic legislation. Specific areas that should be re-evaluated include: (i) addressing the informal practices such as preferential treatment based on personal connections and rent-seeking; and (ii) the provisions referring to the general principles of investment protection which do not meet good practice standards due to lack of specificity and the absence of implementing regulations. Furthermore, the government has indicated that it wishes to introduce a larger range of incentives for the purposes of attracting investment. It will be important to ensure that any incentives regime is effective in attracting investment and achieving the government's policy objectives and is in line with international best practice.

**12. Given that it is a small and landlocked economy with significant connectivity and political impediments, it is imperative for Armenia to elucidate its value proposition for receiving efficiency-seeking FDI.** The government is in the process of conducting an Investment Reform Map process with the support of the World Bank Group<sup>24</sup>. Understanding the quantity, quality and type of FDI that Armenia attracts, as well as its economy-wide and sector value propositions, is an essential starting point to improving its competitiveness. As a country in transition, Armenia seeks to reform and align its investment policy with its development objectives so as to leverage FDI for development by increasing the integration of the domestic private sector into the global economy.

**13. To succeed in supporting the increase in FDI and exports, Armenia will need a strong institutional framework, which is currently lacking.** The Enterprise support agencies that were identified as the implementation agencies for the Export Led Industrial Policy include: (i) Armenia Development Agency (ADA), which is the government entity formally charged with mandate to execute investment attraction and export promotion activities; (ii) Industrial Development Fund (IDF), which was set up to fund the Export Led Industrial Strategy; (iv) Small and Medium Enterprises Development National Center (SME DNC) and (v) SME Invest Universal Credit Organization (SME-UCO), which were set up to support SMEs. Furthermore, EIF was established to support the ICT industry; while the National Competitiveness Foundation of Armenia (NCFA) was created to coordinate and support the government's strategic initiatives to accelerate Armenia's global competitiveness.

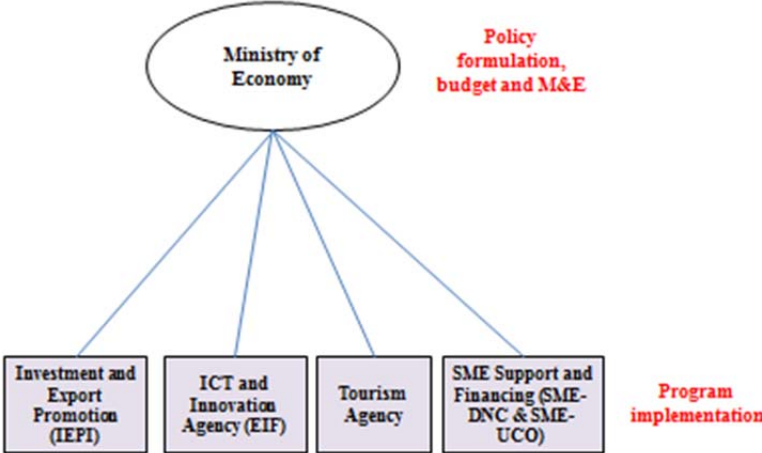
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<sup>24</sup> The preparation budget for this loan and the Multi-Donor Trust fund for Trade and Development financed the initial review of the Investment law and the development of the Investment Reform overview. The proposed IFC Armenia Investment Climate Advisory project (FY2015-2018) will support the development of the Investment Reform Map and amendments to the Investment Law. (Upgrading the National Quality Infrastructure in the Republic of Armenia, World Bank 2011)

**14. There is significant overlap between ADA and IDF.** ADA and IDF’s responsibilities in the area of Export promotion are duplicative; and they, in fact, conduct several activities together, which is an inefficient use of public resources. An institutional assessment of ADA found that it was underperforming predominantly due to lack of funding and its status as a public closed joint-stock company limits its independence and revenue generating opportunities. With approximately US\$300,000 allocated annually to ADA over the years, the financial resources cover only its personnel and operating costs, with little available for proactive investment outreach, image building and expanding export promotion activities beyond attendance at trade fairs. The agency has relied mainly on donor funding for programming and that has led to opportunistic activities with minimal impact.

**15. In February 2014, the government made some key decisions to address the shortcomings of the enterprise support structure.** In particular the decision was made to: i) merge Armenia Development Agency (ADA) and Industrial Development Foundation (IDF) into the Investment, Export Promotion and Industrial Development Agency (IEPI), and (iii) establish the National Tourism Organization as the sole organization focusing on tourism. The proposed institutional structure for the enterprise support agencies is captured in Annex Figure 11. The plan is for IEPI to be a Foundation which will ensure give it more operational independence and enable it to develop the entrepreneurial culture required to meet the needs of Armenian businesses and foreign investors. As a Foundation the agency will: (i) have a Board that is comprised of a majority private sector membership which is empowered to approve the strategic plan, staffing and funding of the agency and; (ii) be able to raise funds from various sources, including donations, grants, contributions from state budget, and income generating activities.

**Annex Figure 9 Proposed Institutional Structure for Armenia enterprise support agencies**



## *Quality Infrastructure assessment*

**16. Given the high level of uncertainty relating to Armenia’s relationship with Russia vis-à-vis the West, the impetus for Armenian firms to meet global quality standards is more crucial than ever.** Products sold in Europe and other Western Countries are typically expected to follow ISO standards while products sold to Russia are expected to be in line with GOST standards. While Armenia has national standards, during the DCFTA negotiations it was in the process of adopting ISO standards.

**17. However, Armenia’s national quality infrastructure suffers from significant weaknesses that hinder technology upgrading and undermine the competitiveness of its exports.** Lack of modern quality infrastructure has severely constrained the ability of Armenian firms to move up the value chain or to find export markets. Most of Armenia’s potential export destinations, including the EU, USA and Russia, often require higher certification standards than those applied domestically. As identified in the report on Quality Infrastructure prepared by the World Bank<sup>25</sup>, less than half of Armenia’s domestic enterprises have obtained international quality certifications.

**18. Significant reforms have taken place in the National Quality Infrastructure in recent years.** Since the adoption of the “Strategy for the Reform of the Republic of Armenia’s Quality Infrastructure (2010-2020) by the government in 2010, several major reforms have taken place; most notably new laws on Metrology, Standardization, Accreditation, and Certification in line with international best practice were developed with the support of donors and adopted in 2012. One of the most important reforms implemented as a result of the new laws was the transformation of the accreditation function from being a department within Ministry of Economy (MoE) into an independent NAB established in 2013 with an accreditation council represented by public and private sector stakeholders.

**19. A National Metrology Strategy has been developed by the government to define the objectives, actions, resources and division of responsibilities needed for a modern metrology system in Armenia.** Building upon the report prepared by the World Bank and the German Metrology Institute (PTB) in 2009, the strategy developed with the support of PTB identified the current gaps in the metrology system including the fact that: (i) while the agency is overstuffed, personnel skills are obsolete due to lack of training, and therefore staff are not well versed in international metrology procedures, (ii) the premises for metrology activities is not suitable for operations and in dire need of renovation, (iii) equipment is outdated and non-functional and needs to be upgraded, and (iv) as a consequence of the above, internationally recognized metrology procedures are not currently applied and need to be adopted. Achieving international recognition should be NMI’s highest priority. The road to international recognition, whether through accreditation by an internationally accepted accreditation body or an independent peer review of the institute’s technical capabilities is expected to take at least five years, beginning from the time when appropriate laboratory facilities for scientific and industrial metrology becomes available.

**20. The newly created NAB is not able to fulfill its mandate and needs financial help as**

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<sup>25</sup> Upgrading the National Quality Infrastructure in the Republic of Armenia, World Bank 2011

**well as technical assistance to achieve its goal of International recognition in the future.** During consultations with the private sector, firms indicated that the few private laboratories that exist are not internationally accredited, firms have to send their products abroad to be tested, a prohibitively expensive endeavor that is unaffordable for most SMEs. The NAB has insufficient resources to meet the needs of the institution, which includes website design, creating an accreditation database, proficiency training for staff, translation of international regulations into Armenia, and office renovations. Experience from other countries in the region shows that with the proper resources and support, the NAB should be able to gain international recognition within five years.

**21. The National Institute of Standards (SARM) is in better condition than the other Quality institutes; however, significant effort is required to attain the goal of the government to be able to support the dual standards of GOST and the ISO.** The operations of the SARM are well funded due to the revenue it generates from its certification activities. Given that its export basket is composed of exports to Russia (GOST standards) and the EU (ISO standards) it is important for the government to be able to support firms exporting to both markets. It is therefore critical that the SARM has the IT systems in place to automate its operations. The important areas that need to be addresses are: (i) establishing an electronic library and database of standards and standardization documents, (ii) upgrading the website, and (iii) enabling online transactions.

**22. The government has confirmed its intention to develop a new organizational structure and staffing plan for NIM and NAB which is in line with international best practice.** Crucial to the success of this effort will be the hiring of management and staff with the management and technical background required to take these institutions through the process of becoming internationally recognized.

## Annex 8: Sectoral Action Plans from Export-Led Industrial Policy

### Armenia: Trade Promotion and Quality Infrastructure Project

1. The Export-Led Industrial Policy was developed by the MoE in 2011 to increase Armenia's economic competitiveness and ensure sustainable economic growth by targeting the expansion of existing and potential exportable sector in the economy. The vision of the policy is to turn Armenia into a country producing high-value and knowledge-intensive goods and services with creative human capital at its core, in line with the country's long-term strategic objective to build a knowledge-based economy.

2. The policy envisioned a phased approach that entails a gradual transition from resource-intensive production to capacity- and skills-based production, and subsequently knowledge-based production to play a dominant role within 20-30 year timeframe. As an initial long-term goals and targets (FY2020) of the policy were as follows:

Goals	Indicators	Targets		
		Baseline (2010)	2015	2020
Expand the exportable sector of the economy	Export of goods-to-GDP ratio	11.0%	16.0%	19.0%
	Total exports volume, US\$ mln	1,011	1,800-2,100	2,800-3,300
Diversify the exportable sector of the economy	Volume of goods exports excluding metal mining products and diamond, US\$ mln	385	700-900	1,300-1,500
Increase the competitiveness of Armenian goods	Real increase in productivity of the processing industry (value added per employee), percent <sup>26</sup>		5.0%	4.0%

3. The main objectives of the policy are to: (i) cooperate with the private sector for implementing development strategies; (ii) enhance the sophistication levels of strategies and operations of firms with export potential; (iii) attract multinational corporations for the increase of productivity; (iv) guide and formulate objectives for business environment reforms, including improvement of business regulatory framework such as reduction of tax and customs administration, automation of export and import procedures, roll-out of e-governance system, etc.; (v) upgrade infrastructure such as logistics, education and national quality infrastructure; and (vi) develop the capacities of business support structures.

4. The Policy outlined three time horizons with differentiated targeting of the policy interventions.

- **Horizon 1. Scaling-up the current capacity (2011-2013):** Focus will be on the sectors with growth potential, established export markets and the biggest export volumes in recent years, with dynamic export performance and possibilities to increase production volumes with moderate capital investment. The policy in this regard will be targeted at export promotion and swift removal of obstacles to development.

<sup>26</sup> Average growth in a given period (2010-2015 and 2015-2020) estimated at compound interest rate. Under such growth the productivity of the processing industry at constant prices will be ~US\$ 16,100 in 2015 and ~US\$ 20,000 in 2020. As of 2010 productivity in the sector is ~US\$ 12,600.



- **Horizon 2. Develop emerging capacities/sectors (2011-2015):** This includes those sectors that have grown dynamically in recent years but are less than US\$10 mln in export volume. The policy in this regard will target attracting larger-scale investment, addressing systemic problems and developing manufacturing/export capacities.
- **Horizon 3. New drivers for growth (2011-2020):** New sectors or sectors with fragmented capacity - primarily knowledge and technology intensive sectors. These sectors will require a broader policy with an emphasis on technology transfer and stimulating innovation.

5. Based on this policy framework, key sectors with export expansion/potential were identified. Selection of key sectors were based on three fundamental principles: (i) the level of contribution to diversified export composition to develop and maintain exporting sectors other than metal mining and metallurgy; (ii) opportunity for cluster development to increase the competitiveness of a sector; and (iii) the magnitude of required supports to efficiently use the limited resources and gain maximum synergies. As a result of the analysis the following sectors were identified:

- **Food Sector** - Brandy-making, Wine-making, Preserve production, Water production, Juice production
- **Jewelry & Diamonds Sector** - Gold and Jewelry production, Watch production, Diamond-cutting
- **Light Industry Sector** - Textile production
- **Health Sector** - Pharmaceuticals & Biotechnologies
- **High-Technologies Sector** - Precision Engineering

6. Action plans (2012 – 2015) for the following sectors were developed in collaboration with industry (Precision Engineering, Wine, Brandy, Textiles, Pharmaceuticals and Jewelry as seen below:

#### Summary of Action Plan 2012-2015

Strategic Directions	Precision Engineering Sector
Improvement of Legal framework	<ul style="list-style-type: none"> <li>• Elimination of custom duty for import of raw materials and components</li> <li>• Removing the regulatory burden of foreign trade of dual-purpose products</li> </ul>
Capacity development	<ul style="list-style-type: none"> <li>• Establishment of ANEL engineering labs</li> <li>• Establishment of a business incubation center in one of the higher educational institutions to promote start-ups</li> <li>• Establishment of technology centers in marzes (Gyumri, Vanadzor)</li> <li>• Creation of network of engineering professionals (ArmEN)</li> <li>• Implementation of “ArmRobotics” project to raise interest of students for robotics and increase the number of higher education applicants for engineering specializations</li> </ul>
Financial Assistance	<ul style="list-style-type: none"> <li>• Investment project financing</li> <li>• Export financing</li> </ul>
Promotion of Business (Domestic & International)	<ul style="list-style-type: none"> <li>• Support to the establishment of business connections</li> <li>• Support for the participation in international expos</li> <li>• Promotion of sales in local market</li> <li>• Support to international certification of Armenian products</li> </ul>

Attraction of FDI	<ul style="list-style-type: none"> <li>• Establishment of free economic zones in the premises of RAO Mars industrial complex and Yerevan Computer Research and Development Institute (YCRDI) and attracting FDI.</li> <li>• Promotion of cooperation between MNCs and local companies.</li> </ul>
Innovation Support	<ul style="list-style-type: none"> <li>• Idea grants for innovative startups</li> <li>• Innovation matching grants</li> <li>• Venture financing</li> <li>• Improvement of Intellectual Property protection system</li> </ul>

<b>Strategic Directions</b>	<b>Wine Production Sector</b>
Improvement of Legal framework	<ul style="list-style-type: none"> <li>• Bringing the legislation into compliance with European regulations</li> <li>• Laboratory infrastructure meeting international standards</li> <li>• Joining the International Organization of Vine and Wine (OIV)</li> </ul>
Supply of Affordable Raw materials	<ul style="list-style-type: none"> <li>• Vineyards monitoring and creation of vineyards register</li> <li>• Implementation of preventive measures against natural disasters and diseases</li> <li>• Research work to improve grape varieties (Creation of vines nursery for selected grape varieties)</li> <li>• Viticulture development program (<i>in collaboration with brandy</i>)</li> </ul>
Quality Assurance & Control	<ul style="list-style-type: none"> <li>• Creation and Operation of modern Laboratory Infrastructure in compliance with international standards</li> <li>• Creation of the Public Outreach System</li> <li>• Development of procedure on Quality Ranking award</li> </ul>
Development of capacities	<ul style="list-style-type: none"> <li>• Improvement of training and education of specialists</li> </ul>
Financial Assistance	<ul style="list-style-type: none"> <li>• Creation of special financing mechanism to foster the development of viticulture and winemaking</li> <li>• Interest rate subsidies for loans to purchase new technology and equipment</li> </ul>
Promotion of Business (Domestic & International)	<ul style="list-style-type: none"> <li>• Creation of Wines of Armenia union to control the quality of exported wine and coordinate the international promotion activities</li> <li>• Participation in international exhibitions with “Wines of Armenia” brand</li> <li>• Organization of tastings in target markets</li> <li>• Creation of common internet portal</li> <li>• Providing markets research to exporters</li> <li>• Promotion of Armenian wines in specialized press and publications</li> <li>• Development of wine tourism in Armenia</li> <li>• Organization of Armenian wine days in target markets by local Armenian embassies</li> <li>• Organization of wine festivals in Armenia to foster internal consumption</li> </ul>

<b>Strategic Directions</b>	<b>Brandy Production Sector</b>
Improvement of Legal framework	<ul style="list-style-type: none"> <li>• Expert study of the legal acts regulating brandy industry and development of portfolio of legislative changes</li> </ul>
Supply of Affordable Raw materials	<ul style="list-style-type: none"> <li>• Vineyards monitoring and creation of vineyards register</li> <li>• Implementation of preventive measures against natural disasters and diseases</li> <li>• Research work to improve grape varieties (Creation of vines nursery for selected grape varieties)</li> <li>• Viticulture development program (<i>in collaboration with wine industry</i>)</li> </ul>
Quality Assurance & Control	<ul style="list-style-type: none"> <li>• Creation and Operation of modern Laboratory Infrastructure in compliance with international standards</li> <li>• Creation of the Public Outreach System</li> <li>• Development of procedure on Quality Ranking award</li> </ul>
Capacity development	<ul style="list-style-type: none"> <li>• Organizational Development of Brandy Producers Union</li> <li>• Improvement of Basic University Education</li> </ul>
Financial Assistance	<ul style="list-style-type: none"> <li>• Creation of special financing mechanism to foster the development of viticulture and winemaking</li> <li>• Interest rate subsidies for loans to purchase new technology and equipment</li> </ul>
Promotion of Business (Domestic & International)	<ul style="list-style-type: none"> <li>• Provision of Information on External Markets</li> <li>• Promotion of Armenian and Armenian Brandy Production in target Markets</li> <li>• Organization of Annual Brandy Festival</li> <li>• Creation of common internet portal of Armenian Brandy</li> </ul>
Other (Improvement of Transport Infrastructure)	<ul style="list-style-type: none"> <li>• Establishment of Transport Committee</li> <li>• Intergovernmental Negotiations on Opening Upper Lars Gate</li> <li>• Creation of Transport Infrastructure cost model and program. Review with the Stakeholders.</li> </ul>

<b>Strategic Directions</b>	<b>Textile, Knitted &amp; Footwear (Light Industry) Sector</b>
Improvement of Legal framework	<ul style="list-style-type: none"> <li>• Simplifying the customs clearance procedures for input materials (fabrics and threads) and production equipment</li> </ul>
Supply of Affordable Raw materials	<ul style="list-style-type: none"> <li>• Developing the local leather input material base</li> </ul>
Quality Assurance & Control	<ul style="list-style-type: none"> <li>• Assessment of a need to establish an industry specific raw material and final product certification laboratory.</li> </ul>
Development of capacities	<ul style="list-style-type: none"> <li>• Assessment of necessity of training / professional development of workforce</li> <li>• Training/professional development of production managers and quality assurance specialists</li> <li>• Promoting cooperation between the private sector and vocational institutions</li> <li>• Introducing the discipline of footwear production in the vocational institutions</li> <li>• Establishing professional educational center of footwear modeling computer design</li> </ul>

Financial Assistance	<ul style="list-style-type: none"> <li>• Subsidizing the interest rate on lending to capital investment programs and working capital lending</li> </ul>
Promotion of Business (Domestic & International)	<ul style="list-style-type: none"> <li>• Establishing a designated entity to support the export of Armenian products to Russia</li> <li>• Participation in expos in target markets</li> <li>• Co-financing of costs associated with certification of Armenian products in target markets</li> <li>• Providing marketing information on target markets to Armenian companies</li> <li>• Creating mechanisms for addressing the problems with unfair competition by importers in the domestic market</li> <li>• On-line promotion of local products</li> <li>• Increasing consumer awareness on local products in the domestic market</li> </ul>
Attraction of FDI	<ul style="list-style-type: none"> <li>• Organizing roadshows in Italy and Germany for the purpose of attracting new companies</li> <li>• Organizing incoming visits of foreign companies interested in outsourcing opportunities in Armenia</li> </ul>
Innovation Support	<ul style="list-style-type: none"> <li>• Integration of education programs of leading apparel and footwear design schools in Armenia</li> <li>• Designing a plan for apparel and footwear design education improvement in Armenia</li> <li>• Organizing fashion shows in Armenia and participation to expos organized abroad</li> </ul>

<b>Strategic Directions</b>	<b>Pharmaceuticals &amp; Biotechnologies Sector</b>
Improvement of Legal framework	<ul style="list-style-type: none"> <li>• Create integrated legal framework of good manufacturing practice (GMP) and other good practices (GP) in pharmaceutical area</li> </ul>
Supply of Affordable Raw materials	<ul style="list-style-type: none"> <li>• Feasibility study on organization of raw material production</li> <li>• Feasibility study on setting up production of pharmaceuticals and biotechnological raw materials in Armenia.</li> </ul>
Quality Assurance & Control	<ul style="list-style-type: none"> <li>• Support local companies to comply with GMP requirements and develop portfolio of pharmaceutical registration documents</li> <li>• Implementation of measures for international recognition of GP certificates issued by GP certification body.</li> <li>• GMP certification of local companies</li> </ul>
Development of capacities	<ul style="list-style-type: none"> <li>• Support to excellence center “GXP” of Medicine Producers and Importers Union (MPI) in development and execution of training centers and carrying out trainings.</li> <li>• Signing of academia-manufacturer framework with the view to promoting science-manufacturer cooperation.</li> <li>• Creation of labor database</li> </ul>
Financial Assistance	<ul style="list-style-type: none"> <li>• Develop mechanism on long-term financing of company investment programs</li> <li>• Operate export financing mechanism</li> <li>• Provide innovative research grants</li> <li>• Investments in capital of local companies operating in the sector</li> </ul>

Promotion of Business (Domestic & International)	<ul style="list-style-type: none"> <li>• Provide information and consultancy on export markets</li> <li>• Organize incoming/ and outgoing business missions</li> <li>• Raise domestic market awareness on local production</li> </ul>
Attraction of FDI	<ul style="list-style-type: none"> <li>• Carry out international business forum of stakeholders and investors in Armenia</li> <li>• Organize roadshows in target countries</li> </ul>

<b>Strategic Directions</b>	<b>Jewelry, Watchmaking &amp; Diamond Cutting Sector</b>
Improvement of Legal framework	<ul style="list-style-type: none"> <li>• New approach for VAT calculation on jewelry end product and change in the income tax mechanism upon sale of jewelry items and gold bars by individuals</li> </ul>
Supply of Affordable Raw materials	<ul style="list-style-type: none"> <li>• Improvement of Russian raw diamond purchasing conditions</li> <li>• Feasibility study implementation regarding possibilities of gold final refinery in Armenia</li> </ul>
Quality Assurance & Control	<ul style="list-style-type: none"> <li>• Completion of the quality regulation legislative framework</li> <li>• Capacity enhancement for regulatory institutes</li> <li>• Re-launch of quality control inspections</li> <li>• Employment of more sophisticated technologies for hallmark determination</li> <li>• Assurance of international recognition for hallmarks</li> <li>• Creation of information systems and assurance of consumer awareness</li> </ul>
Development of capacities	<ul style="list-style-type: none"> <li>• Organization of professional seminars in Armenia and participation in professional seminars organized in other countries</li> <li>• Launching establishment of scientific-educational innovative complex and professional high school of jewelry design in Armenia</li> <li>• State support to workforce trainings</li> </ul>
Financial Assistance	<ul style="list-style-type: none"> <li>• Subsidizing long-term financing of investment projects</li> </ul>
Promotion of Business (Domestic & International)	<ul style="list-style-type: none"> <li>• Supporting the participation in exhibitions in primary target markets</li> <li>• Organization of annual international jewelry exhibitions in Armenia and support to international recognition</li> <li>• Launch of general internet portal for promotion</li> <li>• Promotion of the sector through international professional media</li> </ul>
Attraction of FDI	<ul style="list-style-type: none"> <li>• Establishment of free economic zone for jewelry, diamond cutting and watchmaking sectors</li> <li>• Establishment/attraction of orders of Diaspora and global companies' subsidiaries in the jewelry and watchmaking sectors</li> <li>• Establishment/attraction of orders of Diaspora and global companies' subsidiaries in the diamond cutting sector</li> </ul>

**Annex 9: Survey on obstacles to export potential of Armenian firms**

1. The World Bank team commissioned a survey of the obstacles to export potential of Armenian firms (the survey) during Jan – Feb 2014 to supplement the sectoral strategies and extensive consultations in order to validate the design of and interest in the matching grants and PPP schemes. The main purpose of the survey was an assessment of the market demand among Armenian private firms and the appropriate level of funding size for the proposed matching grant facility, which supports their export development activities. This included a survey of SMEs and larger firms, and follow-up interviews with selected firms to achieve a more precise understanding of their needs and their interests in the relevant proposed instruments in light of the general information collected during the survey.

2. The survey was conducted with 54 enterprises across with the following 11 sectors, which were mainly selected in aligned with the Export-Led Industrial Policy:

- i. Wine Production;
- ii. Brandy Production;
- iii. Precision Engineering;
- iv. Information & Communication Technologies;
- v. Pharmaceutical and Biotechnologies;
- vi. Jewelry Production;
- vii. Juice Production;
- viii. Cans and Preserves Production;
- ix. Bottled Water Production;
- x. Textile Production; and
- xi. Footwear Production

3. The survey and interviews of Armenian firms addressed mainly the following areas:

- The information whether the firm exports and/or is interested in accessing international markets;
- Biggest impediments to expanding into international markets;
- The kind of consulting services they used and find useful to be offered;
- The kind of R&D investment they have made in the past 3 years; and
- Whether the firm collaborates with other firms in the same industry

4. Summary of key findings for each sector from the survey is found as seen below:

**I. Wine Production**

<b>Topics</b>	<b>Main Findings</b>
Export Markets	<ul style="list-style-type: none"> <li>• 70%-100% of exports of the majority of surveyed enterprises are made to Russia, although some smaller shipments are made to EU countries.</li> <li>• However, leaders of the wine production sector do export to Western markets including USA, Canada, EU member states, while some export to Japan</li> </ul>
Impediments hindering exports	<ul style="list-style-type: none"> <li>• Newly established and smaller producers of wine face lack of working capital, knowledge on export markets, funds for export promotion</li> <li>• Some countries have sophisticated requirements and regulatory framework for exported products which local exporters of wine cannot meet</li> <li>• International markets are saturated and the competition grows steadily. Consumers are not familiar with Armenian wine and export promotion requires huge expenses;</li> </ul>

	<ul style="list-style-type: none"> <li>• Quality standards of Armenian wine are not in compliance with international market requirements; clients complain over the quality of delivered products;</li> <li>• Certification is usually required to sell to foreign markets. The necessary documentation is very expensive and unaffordable;</li> <li>• Producers do not possess sufficient knowledge on export markets and do not have enough information on the preferences and requirements of international consumers.</li> </ul>
Use of Consulting / Export Services	<ul style="list-style-type: none"> <li>• While current use of consulting services is limited, companies indicated their needs for the following areas: <ul style="list-style-type: none"> <li>▪ Inputs management system;</li> <li>▪ Target market surveys;</li> <li>▪ Business Matching</li> </ul> </li> </ul>
Investments in R&D	<ul style="list-style-type: none"> <li>• Wine producers do not currently conduct any R&amp;D activities but have expressed interest in improving grape varieties.</li> </ul>
Cooperation within industry	<ul style="list-style-type: none"> <li>• Actual cooperation of wine producers is rather weak however firms are open to opportunities for horizontal cooperation with other firms in the industry</li> </ul>

## II. Brandy Production

Topics	Main Findings
Export Markets	<ul style="list-style-type: none"> <li>• 65%-100% of exports are made to Russia and CIS countries.</li> <li>• Some producers opened independent importing companies to market their production in Russian regions.</li> <li>• Big producers have started diversifying their export markets, realizing the unpredictability of the Russian economy and importing policies. However, Armenian brandy is not familiar among EU countries</li> </ul>
Impediments hindering exports	<ul style="list-style-type: none"> <li>• The obstacles stated by brandy producers related to limited finances and high interest rates of bank loans.</li> </ul>
Use of Consulting / Export Services	<ul style="list-style-type: none"> <li>• The consulting services used by the industry primarily related to financial and technology-related services</li> <li>• The large enterprises invest in the technology which requires consulting services with cost from EUR10,000 to EUR35,000.</li> </ul>
Investments in R&D	<ul style="list-style-type: none"> <li>• Conduct mainly in-house R&amp;D activities directed to technological improvement.</li> <li>• Believe that modern equipment improves the quality of the products</li> </ul>
Cooperation within industry	<ul style="list-style-type: none"> <li>• The Association of Armenian Brandy Producers was established in 2012 with the mission of the Association to improve the quality of Armenian brandy and protect the economic interests of local producers.</li> <li>• The Association has established a laboratory in the Biochemistry Institute, equipped with modern equipment.</li> <li>• There is strong relationship between brandy producers. They supply inputs to each other, spirit, exchange information on market developments and technological know-how, consolidate orders for exporting purposes, help each other with marketing issues overseas, help to identify used or new equipment for the production, etc.</li> </ul>

## III. Precision Engineering

Topics	Main Findings
Export Markets	<ul style="list-style-type: none"> <li>• Firms export to a wide range of countries including Russia, USA, EU Countries, Israel and CIS countries</li> </ul>
Impediments	<ul style="list-style-type: none"> <li>• High transportation costs,</li> </ul>

hindering exports	<ul style="list-style-type: none"> <li>• Expensive input materials, even when raw materials are available in Armenia;</li> <li>• Custom regulation and duties;</li> <li>• Lack of information about export markets;</li> <li>• Absence or lack of reliable partners in targeted/desired markets;</li> <li>• Limited information about product standards, regulations and requirements in export markets</li> </ul>
Use of Consulting / Export Services	<ul style="list-style-type: none"> <li>• Companies mostly do not use consulting services due to high cost, however they indicated they would like support finding partners overseas (match making services)</li> </ul>
Investments in R&D	<ul style="list-style-type: none"> <li>• Invest in in-house R&amp;D to develop new products and improve technology</li> </ul>
Cooperation within industry	<ul style="list-style-type: none"> <li>• Information exchange between engineering enterprises is welcomed and supported by all firms. Strong existing relationships between few companies mostly in the form of outsourcing specific tasks. Some enterprises exchange information or research and technology know-how.</li> </ul>

#### IV. Information & Communication Technologies

Topics	Main Findings
Export Markets	<ul style="list-style-type: none"> <li>• IT is unique in Armenia with export volumes exceeding local sales significantly due to availability of labor and no transportation impediments. All surveyed companies are intensively exporting their products; their majority sells their products only in foreign markets.</li> <li>• The main export markets of surveyed companies are the USA and European countries.</li> </ul>
Impediments hindering exports	<ul style="list-style-type: none"> <li>• The main impeding factor for the production and sales (including exports) of IT products is the lack of qualified specialists.</li> </ul>
Use of Consulting / Export Services	<ul style="list-style-type: none"> <li>• Do not use consulting services extensively, however, they have requirements in the following areas: <ul style="list-style-type: none"> <li>▪ Marketing;</li> <li>▪ Establishment of business partnership and matchmaking;</li> <li>▪ Sales and promotion;</li> <li>▪ Business development;</li> <li>▪ Design</li> </ul> </li> </ul>
Investments in R&D	<ul style="list-style-type: none"> <li>• IT companies conduct extensive R&amp;D. Intense competition leads them to continuously improve their technologies</li> </ul>
Cooperation within industry	<ul style="list-style-type: none"> <li>• All surveyed companies are the members of the Union of Information Technologies Enterprises (UITE) some stated that membership to UITE does not significantly contribute to enhancement of their exports. UITE mainly aims at solving internal problems such as protection of the rights of its members at different State agencies.</li> </ul>

#### V. Pharmaceutical and Biotechnologies

Topics	Main Findings
Export Markets	<ul style="list-style-type: none"> <li>• Main export markets of Armenian pharmaceutical enterprises are CIS countries</li> </ul>
Impediments hindering exports	<ul style="list-style-type: none"> <li>• Low price competitiveness in foreign markets. High transportation costs negatively affect prices of Armenian pharmaceutical products in foreign markets. The inputs are mainly imported and related transportation costs are quite high.</li> <li>• Producers have to store a high level of inputs to ensure uninterrupted production</li> </ul>



	<p>process which ties up working capital;</p> <ul style="list-style-type: none"> <li>• Lack of awareness and low reputation. Armenia and Armenian products are not well known and reliable for foreign consumers. While buying pharmaceutical products the consumers prefer to buy pharmaceuticals of well-known and reliable international producers;</li> <li>• Large expenses for registration. Registration of pharmaceuticals in foreign markets is a time-consuming and expensive process.</li> </ul>
Use of Consulting / Export Services	<ul style="list-style-type: none"> <li>• The surveyed enterprises regularly participate in trainings and seminars organized by different (international) organization on topics of financial planning, marketing, accounting, and other.</li> <li>• Furthermore, enterprises of this sector have to apply for and obtain GMP certification as of 2017, which will require large investments in amount of US\$300,000 to US\$500,000.</li> </ul>
Investments in R&D	<ul style="list-style-type: none"> <li>• R&amp;D in pharmaceutical production sector is mainly conducted for the improvement of qualitative features of pharmaceutical products, invention and testing of new products.</li> </ul>
Cooperation within industry	<ul style="list-style-type: none"> <li>• Members of the Union of Medicine Producers and Importers (UMPI) of Armenia. All managers of surveyed enterprises appreciate the work of the UMPI as follows: <ul style="list-style-type: none"> <li>▪ Provision of relevant information on potential markets, sales' and exports' opportunities;</li> <li>▪ Intermediation of the relations between producers of pharmaceutical products and international organizations and their projects in Armenia.</li> </ul> </li> </ul>

## VI. Jewelry Production

Topics	Main Findings
Export Markets	<ul style="list-style-type: none"> <li>• Russia and former soviet republics are the main export markets</li> </ul>
Impediments hindering exports	<ul style="list-style-type: none"> <li>• High working capital requirements - due to expensive inputs</li> <li>• High capital investment requirements to expand operations</li> <li>• Product promotion and marketing difficulties. Attending international exhibitions and expos is regarded as the most effective promotional measure which is quite difficult</li> </ul>
Use of Consulting / Export Services	<ul style="list-style-type: none"> <li>• Currently do not use consulting services due to high costs but would value marketing services</li> </ul>
Investments in R&D	<ul style="list-style-type: none"> <li>• Jewelry enterprises do not conduct intensive R&amp;D particularly given the scare resources</li> </ul>
Cooperation within industry	<ul style="list-style-type: none"> <li>• Some jewelry enterprises are members of the Armenian Jewelers' Association (AJA). However some firms think membership in the AJA does not contribute to increasing of sales and exports.</li> <li>• AJA is mainly engaged in advocating and protecting the producers' rights during legislative initiatives, which is not the only problem of the sector.</li> </ul>

## VII. Juice Production

Topics	Main Findings
Export Markets	<ul style="list-style-type: none"> <li>• Russian market is the biggest for the juice producers in terms of the exports volume. Other export destinations for Armenian juices are Georgia, Ukraine, Kazakhstan, France, Belgium, Turkmenistan, and USA. Most exporters have developed partnership network to sell their products (juices) overseas.</li> </ul>

Impediments hindering exports	<ul style="list-style-type: none"> <li>• Lack of access to finance and high interest rates</li> <li>• High cost for cargo transportation;</li> <li>• Limited marketing capacities;</li> <li>• Lack of reliable partners in overseas markets.</li> </ul>
Use of Consulting / Export Services	<ul style="list-style-type: none"> <li>• Surveyed firms do not use consulting services but would be interested in consulting firms that can provide good marketing and valuable export-related services at a reasonable cost. The firms operate in a highly competitive environment both at the local and international markets and therefore need strong marketing capacities and financial resources.</li> </ul>
Investments in R&D	<ul style="list-style-type: none"> <li>• Juice producers conduct in-house R&amp;D intensively aiming at introduction of some new products and packaging.</li> </ul>
Cooperation within industry	<ul style="list-style-type: none"> <li>• Surveyed enterprises are members of newly established Union of Canned Food and Juice Producers. The Union is in stage of formation in terms of structure, membership, and mission. However, producers are skeptical of the initiative and think that was driven by political interests rather than supporting the sector.</li> <li>• There is a close cooperation between some food processing enterprises, such as for purchasing inputs or selling products, outsourcing some technological processes (aseptic processing) and similar.</li> <li>• Cooperation within the industry is more than welcomed by many enterprises, if it is based on the business needs of the sector representatives and trust.</li> </ul>

### VIII. Cans and Preserves Production

Topics	Main Findings
Export Markets	<ul style="list-style-type: none"> <li>• Dried fruit producers mainly export to Russia, due to the good price, affordable transportation cost, and minimum certification requirements. Primary customers for canned production are Diaspora Armenians.</li> </ul>
Impediments hindering exports	<ul style="list-style-type: none"> <li>• Small production volumes (especially for dried fruits);</li> <li>• Limited financial resources;</li> <li>• Conditions of production facilities;</li> <li>• High cost for cargo transportation;</li> <li>• Absence of international certification.</li> </ul>
Use of Consulting / Export Services	<ul style="list-style-type: none"> <li>• Export-related consulting services would be demanded if consulting firms can offer good quality of services.</li> </ul>
Investments in R&D	<ul style="list-style-type: none"> <li>• R&amp;D activities conducted (in-house and outsourced) aim to improve the technological processes, experiment with new varieties, and test alternative production methods.</li> </ul>
Cooperation within industry	<ul style="list-style-type: none"> <li>• In canning sector, the cooperation is rather weak, although some orders may be outsourced to other enterprises.</li> <li>• In the dried food sub-sector the cooperation between the enterprises is strong and they unify mainly to consolidate the production volume for export.</li> <li>• The enterprises also regularly exchange information on drying technologies and achievements they have in this area</li> </ul>

### IX. Bottled Water Production

Topics	Main Findings
Export Markets	<ul style="list-style-type: none"> <li>• Main export markets include Russia, USA, Georgia, Ukraine and Poland</li> </ul>
Impediments	<ul style="list-style-type: none"> <li>• Bottled water is a lower-value product and high transportation costs increase the</li> </ul>

hindering exports	<p>price significantly;</p> <ul style="list-style-type: none"> <li>• Awareness on Armenian products is generally low among foreign consumers;</li> <li>• Very high entry fees into Russian retail networks. The major market of Armenian bottled water is Russia, where products are mainly sold via retail networks. They usually require so called “entry fees” from suppliers that are often not affordable for Armenian producers;</li> <li>• Lack of compliance with international standards. Bottled water standards in Armenia substantially differ from those applied in European countries and North America.</li> </ul>
Use of Consulting / Export Services	<ul style="list-style-type: none"> <li>• Consulting services are used on an as-needed basis for the areas of: <ul style="list-style-type: none"> <li>▪ Investment Planning;</li> <li>▪ Feasibility Studies;</li> <li>▪ Accounting Consultancy;</li> <li>▪ Financial Consultancy.</li> </ul> </li> </ul>
Investments in R&D	<ul style="list-style-type: none"> <li>• Producers of bottled water are equipped with in-house laboratories to test the water and conduct R&amp;D activities.</li> </ul>
Cooperation within industry	<ul style="list-style-type: none"> <li>• There is no industry union of bottled water producers due to lack of cooperation and intense competition between enterprises.</li> </ul>

## X. Textile Production

Topics	Main Findings
Export Markets	<ul style="list-style-type: none"> <li>• Main export markets include Canada, USA, Russia, EU, UAE</li> </ul>
Impediments hindering exports	<ul style="list-style-type: none"> <li>• Main competitor (Turkey) is also the primary source of thread and fabric</li> <li>• Limited marketing capabilities;</li> <li>• Relatively small production volumes;</li> <li>• Lack of reliable partners;</li> <li>• Unfair regulatory framework;</li> <li>• High cost/price of local production;</li> <li>• Limited financial resources.</li> </ul>
Use of Consulting / Export Services	<ul style="list-style-type: none"> <li>• While the surveyed enterprises do not use consulting services the majority of companies have difficulties in finding partners overseas and consider this factor as critical for entering new markets. Thus, services related to business partnership and matchmaking is considered as beneficial by the enterprises.</li> <li>• Technical support in management, marketing, and operation will also be very useful.</li> </ul>
Investments in R&D	<ul style="list-style-type: none"> <li>• The R&amp;D conducted in the sector is conducted for the research for technology, quality improvement, expanding the product range and decreasing the cost of production. However resources are limited and therefore owner/manager conducts research jointly with the technologist/engineer and designers.</li> </ul>
Cooperation within industry	<ul style="list-style-type: none"> <li>• Union of Textile and Shoe Manufacturers with 20 members was established recently however few of the enterprises have business relationship with each other</li> </ul>

## XI. Footwear Production

Topics	Main Findings
Export Markets	<ul style="list-style-type: none"> <li>• Armenian footwear production is familiar only to the post-soviet area and mainly to Russia.</li> </ul>
Impediments hindering exports	<ul style="list-style-type: none"> <li>• Main competitor (Turkey) is also the primary source of leather and other inputs</li> <li>• Limited financial resources;</li> </ul>

	<ul style="list-style-type: none"> <li>• Expensive local production;</li> <li>• Poor/unfair regulatory framework;</li> <li>• Absence of warehouse facilities, where the exported products can be stored and distributed.</li> </ul>
Use of Consulting / Export Services	<ul style="list-style-type: none"> <li>• Although the surveyed enterprises do not use consulting services, the survey identifies that the majority of companies have difficulties in finding partners overseas and consider this factor as critical for entering new markets.</li> <li>• Services related to business partnership and matchmaking is considered as beneficial by the enterprises.</li> </ul>
Investments in R&D	<ul style="list-style-type: none"> <li>• Footwear producers engage in R&amp;D to improve technological processes and the quality, expand the product range and decrease the cost of production.</li> <li>• Stronger enterprises recruit designers and modelers, who monitor fashion trends and introduce new models for production.</li> </ul>
Cooperation within industry	<ul style="list-style-type: none"> <li>• Union of Textile and Shoe Manufacturers with 20 members was established recently. The mission of the Union is to protect members' economic interests, lobby customs' and tax legislation.</li> <li>• Co-operation between sector representatives is limited to information exchange on input materials, regulations, legislative changes, import/export issues, etc.</li> <li>• Few of the enterprises have business relationship with each other.</li> </ul>

## **Annex 10: Economic and Financial Analysis**

### **Armenia: Trade Promotion and Quality Infrastructure Project**

1. The economic justification for government intervention in the activities for the Project is to alleviate some of the market and institutional failures that market forces alone are not efficient to tackle. Investment and Export promotion programs are common components of most countries' trade policies. These programs have been traditionally justified as interventions that correct market failures such as information asymmetry. The Quality Infrastructure system is considered as a public good because it essentially helps to solve market imperfections. For example, leaving metrology system to markets alone can lead the under-provision of standards, particularly in developing countries where lack a strong tradition of industry associations. It can also lead to over-provision of standards, and excess market standards can have negative economic effects. Supporting NAB's efforts to become internationally accredited will significantly reduce the costs associated with certification of products by firms as due to the availability of laboratories with accreditation recognized internationally, companies will no longer need to travel abroad for certification procedures.

2. In order to estimate the monetary impact of the planned activities, a cost-benefit analytical exercise is undertaken. The first key assumption is that the costs of the project are equal to the total loan amount allocated for the three components - or US\$50 million. The benefits resulting from each of the planned activities are forecasted using a set of scenarios that are described below, and are assumed to accrue over a period of ten years. Using a discount rate of 10 percent, (based on general Bank guidelines)<sup>27</sup>, the analysis estimates the overall monetary gains from the project, net of costs, by employing the net present value (NPV) formula. The calculations yield a net benefit (or NPV) of US\$34.3 million.

3. A key component of the project will be the development of programs that will support and improve the capacity of local exporters to compete in local markets including: representation offices in key target markets, workshops, export readiness assessment, market analysis and online platforms, among other. These activities will be undertaken by a new Investment and Export Promotion Agency, which will emerge from the consolidation of ADA and IDF. According to research on the impact of export promotion agencies (Lederman, 2009), these types of institutions are effective and have a positive effect on export levels. Study estimates suggest that an increase of 10 percent in the budget of export promotion agencies leads to an increase in exports of between 0.6 and 1 percent. Based on the Lederman study a mid-range factor of 0.8 percent is used for the purposes of our current calculation. The export promotion activities to be funded by the project amount to about US\$3.5 million (out of the US\$6.3 million allocated for sub-component 2.1). This represents an approximate yearly allocation of US\$700 thousand to support exports based on the project activities. Information from the Armenian authorities indicates that the consolidated ADA and IDF budgets for 2013 amounted to US\$1 million, out of which we assume that approximately 70 percent was used for export promotion. The new yearly budget for this type of activities is therefore almost doubled for the life of the project, which

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<sup>27</sup> Discount rate: The Bank traditionally has not calculated a discount rate but has used 10-12 percent as a notional figure for evaluating Bank-financed projects. This notional figure is not necessarily the opportunity cost of capital in borrower countries, but is more properly viewed as a rationing device for World Bank funds.

would lead, using the Lederman study, to an addition to exports of around US\$60 million, over an estimated ten year period.

4. Based on the extensive experiences in developed and developing countries, Armenian enterprises will benefit greatly from matching grants. Matching grants are better suited for knowledge based investments than loans for several reasons including the fact that: (i) enterprises are unlikely to borrow for projects whose benefits cannot be fully appropriated especially since it requires more effort than current production, and increase in profits is uncertain, and (ii) lenders prefer to use physical assets to secure loans; they are reluctant to lend when the project involves knowledge rather than investments in plant and equipment. Furthermore, with matching grants it is easier to direct the funding to its intended objective than to loans which can be typically used as needed by beneficiaries. As noted in a recent evaluation of the matching grant programs of the Bank by IEG, matching grants are useful in providing incentives to firms that otherwise would not invest in technology upgrading and can offer greater control of the activities to be supported.

5. Approximately 100 firms are estimated to benefit from the export promotion matching grants over the life of the project, with a total of \$3 million allocated to the grants. An impact evaluation study conducted in 2013 for the matching grant facility offered in Moldova shows that an allocation of US\$2 million to the program resulted in an increase in exports of approximately 5 percent from the baseline year. Using this model, we estimate that the current matching grant allocation will yield an increase in exports of approximately US\$186 million over 10 years, as a result of enhancements in firm export-related knowledge and marketing activities.

6. Improvements in the national quality infrastructure are likely to have wide-ranging positive effects on the economy by allowing domestic firms to obtain international quality certifications at a lower cost, and consequently helping them to increase value added and enter new export markets. In order to estimate the monetary impact of the activities proposed under component 3 - modernizing the national quality infrastructure, we use the results of the Kunzmann et al (2005) study<sup>28</sup> on the role of metrology in the productive process. The assessment find evidence that investing 1 euro in metrology yields benefits equivalent to a 3 euro increase in GDP. The current project allocates US\$8.7 million for modernization of the National Institute of Metrology and the National Accreditation Body. It is assumed therefore that the project investment would yield economic benefits of approximately US\$25.9 million, which would accrue over a period of 10 years, taking into account the time needed for this type of structural changes to have a full impact on the economy.

7. The goal of the Public Private Partnerships (PPPs) for increasing investments and exports is to accelerate the upgrading of industries with export potential and attract efficiency seeking FDI. Research shows that strong industrial clusters register higher employment growth as well higher growth in terms of number of firms and patents (Delgado, Porter and Stern, 2011). Moreover, in terms of direct monetary impact, a 2013 assessment undertaken by the German Institute for Innovation and Technology shows that each euro invested by public authorities in

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<sup>28</sup> Kunzmann H., Pfeifer T., Schmitt R., Schwenke H., Weckenmann A. (2005): *Productive Metrology – Adding Value to Manufacture*, Annals of the CIRP 54/2 (2005), Antalya, Turkey, August 2005.

cluster development generates a monetary benefit of EUR 2.3. In this context, we approximate that the current 8.7 million support for the development of quality infrastructure will result in benefits of US\$ 26 million, spread over a time frame of 10 years.

8. Attracting efficiency seeking FDI is another key goal of the Armenian development strategy. Literature on FDI spillovers indicates that foreign direct investment has significant productivity benefits for local suppliers. Using data on FDI inflows to Armenia for 2011-2012 in key sectors targeted by the Armenian Export Led Industrial Strategy (such as food production, textiles, pharmaceuticals or IT) and the average number of estimated FDI projects in these industries<sup>29</sup> we estimate that the average value of this type of investment in Armenia to be of approximately US\$6.7 million and conservatively envisage that the project will succeed in bringing at least two such Research and Skills Development PPPs to Armenia throughout the following 5 years<sup>30</sup>.

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<sup>29</sup> FDI markets trend report: Armenia 2010-2013)

<sup>30</sup> As these are individual investments to be attracted within the lifetime of the project, these are expected to accrue over a period of five years.