

# *PROJECT SUMMARY*

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<b>Project title</b>	Strengthening National Quality Infrastructure and Industrial Statistics in the Lao PDR
<b>Grant recipient</b>	National Implementation Unit, Department of Planning and Cooperation, Ministry of Industry and Commerce, Government of Lao PDR
<b>Starting date</b>	August 2013
<b>End date</b>	July 2016
<b>Duration</b>	3 years
<b>Enhanced Integrated Framework funding sought in USD</b>	2,520,350
<b>Government contribution in USD</b>	871,200

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## **ABBREVIATIONS AND ACRONYMS**

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ADB	Asian Development Bank
AEC	ASEAN Economic Community
ASEAN	Association of Southeast Asian Nations
BoL	Bank of Lao PDR
DoIH	Department of Industry and Handicraft
DSM	Department of Standardization and Metrology
DTIS	Diagnostic Trade Integration Study
EIF	Enhanced Integrated Framework
GDP	Gross Domestic Product
HPAI	Highly Pathogenic Avian Influenza
IAF	International Accreditation Forum
ILAC	International Laboratory Accreditation Cooperation
IT	Information Technology
LDC	Least Developed Countries
LNAB	Lao National Accreditation Bureau
LSB	Lao Statistics Bureau
MAS-Q	Metrology, Accreditation, Standardization, and Quality
MoF	Ministry of Finance
MoIC	Ministry of Industry and Commerce
MoST	Ministry of Science and Technology
MPI	Ministry of Planning and Investment
MRA	Mutual Recognition Arrangement
NSEDP	National Socio-Economic Development Plan
NIU	National Implementation Unit

NMI	National Metrology Institute
NSS	National Statistical System
NSTA	National Science and Technology Administration
PEC	Program Executive Committee
QMS	Quality Management Systems
SIDA	Swedish International Development Agency
SME	Small and Medium size Enterprises
SNA	System of National Accounts
SPS	Sanitary and Phyto-sanitary
TBT	Technical Barriers to Trade
TDF	Trade Development Facility
TFM	Trust Fund Manager
TPSWG	Trade and Private Sector Development Working Group
UNIDO	United Nations Industrial Development Organization
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development
WTO	World Trade Organization

## SECTION I: PROJECT ACCOUNTABILITY ARRANGEMENTS

<b>I.1 Project title</b>	Strengthening National Quality Infrastructure and Industrial Statistics in the Lao PDR
<b>I.2 Category of project</b>	Technical assistance and capacity building.
<b>I.3 Grant recipient</b>	National Implementation Unit, Department of Planning and Cooperation, Ministry of Industry and Commerce, Government of Lao PDR
<b>I.4 Implementation entity</b>	Department of Standardization and Metrology, Ministry of Science and Technology; Department of Industry and Handicraft, Ministry of Industry and Commerce.
<b>I.5 Project duration</b>	3 years
<b>I.6 Total project cost</b>	USD 3,391,550
<b>I.7 EIF funding sought</b>	USD 2,520,350
<b>I.8 Other sources of funding</b>	None <sup>1</sup>
<b>I.9 Objective of the project</b>	

Primary objectives of the project are: A) to strengthen the national quality infrastructure; and B) to support the enhancement of industrial statistics, thus contribute to increasing quality, safety and reliability of Lao products and services, and improving overall competitiveness of Lao businesses.

### **I.10 Results Statement**

The expected results of component A include a strengthened national quality infrastructure, including standards, metrology and conformity assessment. This will be based on three interlinked pillars that enable participation in international trade and will satisfy the technical requirements of the multilateral trading system. More specific outcomes are listed below:

1. Adoption and implementation of the World Trade Organization Technical Barriers to Trade (WTO TBT) Code of Good Practice for Standardization.

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<sup>1</sup> Government Contribution: USD 871,200

2. Improved level of testing and certification of laboratories within industries, the private sector and Government in Lao PDR have been developed and promoted.
3. Formally establish the Lao National Accreditation Bureau (LNAB), which becomes a signatory of the International Laboratory Accreditation Cooperation (ILAC) and International Accreditation Forum (IAF) Mutual Recognition Agreement.
4. Formally establish a Lao Quality Center and full operations of the Champasack Science Based Quality Laboratory.

Given the small size and hence trade volume of the country, the Lao national quality infrastructure needs to focus on high priority areas and complemented by the national systems of its neighbors.

The expected result for component B will be an enhanced institutional capacity for policy-oriented empirical analysis of the country's manufacturing sector and data-user services as well as an improved and integrated computerized system of the central database within the Ministry of Industry and Commerce.

### **I.11 Brief description of the project**

The proposed project has two components:

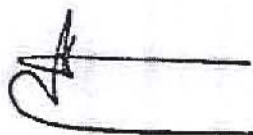
Component A addresses market access issues for the private sector through providing better access to certification and testing services. As these services are presently carried out abroad, mainly in Thailand and Vietnam, for Lao traders these services are expensive, time-consuming, and require lots of logistical efforts. This puts Lao traders at a disadvantage and harms the private sector in tapping into new markets and participating in regional and global supply and value chains. This project will strengthen the national system so services in high demand (that can be offered at a cost and time competitive basis) can be carried out domestically. For others, the private sector will still have to rely on its neighbors.

In addition, the project aims to increase quality, safety and reliability of domestically offered products and services, and improve competitiveness through implementing national standards, technical regulations, and formulating and implementing viable industrial development policies based on systematic, comparable and action-oriented country analysis.

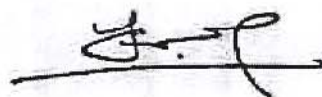
Component B aims to enhance the institutional capacity of the Department of Industry and Handicraft (DoIH) of the Ministry of Industry and Commerce (MoIC) for carrying out policy-oriented statistical analysis on the country's manufacturing sector by establishing an integrated central statistical information system within the Department of Industry and Handicraft and training for staff in the areas of research, statistical analysis and information technology (IT).

Since various technical, financial and human resource constraints lead to poor data quality and impede the Government's ability to design, implement and monitor public policies, especially in the area of industry and manufacturing, this intervention will strengthen the Government's policy making and monitoring capacity.

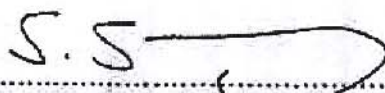
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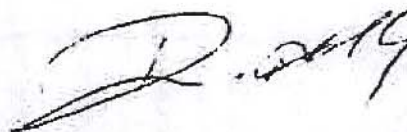
.....  
Dr. Nam Viyaketh  
Minister of Industry and Commerce of the Lao  
People's Democratic Republic



.....  
H.E. Mme. Khemmani Pholsena  
EIF National Focal Point



.....  
Mr. Stefan Schleuning  
Head of Cooperation  
Delegation of the European Union to Lao PDR  
On behalf of the EIF Donor Facilitator



.....  
ES Executive Director on behalf of the EIF  
Board



## SECTION II: STRATEGIC CONTEXT

### *II.1 Justification for Component A: Strengthening the National Quality Infrastructure in Lao PDR*

#### **II.1.1 Relevant Strategic Frameworks**

The following section highlights the relevant strategic frameworks and plans of the Lao Government for implementing component A of the project.

#### *National Socio-Economic Development Plan 7 and Diagnostic Trade Integration Study*

The key concrete strategy and measures for maintaining a high growth rate in the manufacturing industry and service and commerce sectors have been defined in the Trade and Private Sector Development Roadmap, guided by the National Socio-Economic Development Plan 7 (NSED 7) and research for the Diagnostic Trade Integration Study (DTIS). The Roadmap is the program for the Trade and Private Sector Development Working Group (TPSWG) under the Round Table process. As such, it will be a living document in which Action Matrix priorities are linked to the overall results. The Roadmap will be periodically updated and final indicators and baseline information determined.

The Roadmap consists of three main pillars, including:

- (i) Establishing a conducive trade and investment environment through:
  - a. Promoting trade integration (post-WTO accession, and towards the AEC)
  - b. Improving the business environment
  - c. Improving trade facilitation
  - d. Building quality infrastructure
- (ii) Improving competitiveness, and the quality and value of agribusiness, manufacturing and service sectors through:
  - a. Implementing SME firm-level quality and productivity support measures
  - b. Supporting Public-Private Dialogue and sector-specific support measures in the following sectors:
    - Agribusiness
    - Tourism
    - Textile handicraft
    - Garments
    - Wood processing
    - Promoting offshoot industries from the mining and hydropower industries
- (iii) Improving the aid for trade governance framework for mainstreaming trade and private sector development through:



- a. Mainstreaming poverty, gender and the environment
- b. Institutional capacity development
- c. Sector Working Group Development and mainstreaming trade into National Development Planning
- d. Trade and Aid for trade governance framework and implementation

The proposed project is designed to support pillar one (“Establish conducive trade and investment environment”) intervention area d) (“building quality infrastructure”) and intervention area b) (“improving the business environment”).

#### *Proposed National Quality Infrastructure (NQI) Strategy*

The Ministry of Science and Technology is presently also in the final process of inaugurating a comprehensive NQI strategy. Despite the fact that the strategy is not yet officially adopted by the Government, key pillars address capacity building issues, the institutional set-up of the Department of Standardization and Metrology (DSM), as well as technical issues (standardization, metrology, accreditation, conformity assessment, etc.), based on a comprehensive “Capacity Needs Assessment” report from July 2011.

Priority areas of the NQI strategy by actor are listed in the following:

##### *For Government*

- 1) Increase operational funding and numbers of professional staff to levels necessary to make adequate use of capacities being created (under on-going and new projects).

##### *For Government and Development partners*

###### *A. Institutional Development*

- 2) Establish a TBT Enquiry Point based on good international practices and tailored to the requirements of the Lao economy and its trading partners
- 3) Conduct empirical assessments of obstacles for trade and gaps in protection of safety of consumers caused by gaps in quality infrastructure
- 4) Adopt NQI Strategy
- 5) Upgrading of the legal and regulatory framework for TBT

###### *B. Implementing the Strategic Plan*

- 6) Training for Government staffs in certifying units and laboratories in international principles of conformity assessment and certification.
- 7) Prepare a national strategy for laboratory development<sup>2</sup>
- 8) Support quality management in laboratories<sup>3</sup>
- 9) Support the development of private sector and consumer organizations, and their engagement in the development agenda for NQI<sup>4</sup>
- 10) Selectively implement other elements of the strategic plan

#### *International commitments*

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<sup>2</sup> The strategy could be prepared jointly with a strategy for SPS laboratories

<sup>3</sup> The support can partly be done jointly with support for SPS laboratories

<sup>4</sup> Support for SPS and TBT can be partly combined.

The Lao PDR has committed to various multilateral agreements since the country joined the World Trade Organization (WTO) in 2013 and is member and active participant of several regional groupings i.e. the Association of Southeast Asian Nations (ASEAN). Particularly relevant for the implementation of project component A are

- WTO TBT-agreement, effective for Lao PDR 1 January 2015; and
- ASEAN Economic Community (AEC) Blueprint where Lao PDR must comply with by 31 December 2015.

As the project ends in 2016, significant steps must be achieved before the deadlines of the above commitments.

### **II.1.2 Overview of the existing national quality infrastructure**

At present, the NQI in Lao PDR is very weak although technical barriers to trade are playing an increasingly important role in trade facilitation in Lao PDR. As traditional barriers to trade, such as tariffs fall there is an increased focus by key trading partners on the enforcement of TBT and sanitary and phytosanitary (SPS) regulations.

In Lao PDR, the NQI lacks the capacity to provide sufficient conformity assessment services to enable regulatory authorities to verify compliance with TBT regulatory requirements. Consequently, exporters, who need to comply with international standards required by their buyers, are not able to obtain such services in the country and have to conduct the necessary testing and certification abroad. This is not only more costly and time consuming but requires also a greater logistical effort.

In addition, standardization and metrology is needed domestically in any area where standards are being set and enforced by the Government such as for weight, temperature, energy, volume, etc. A strengthened NQI will benefit the private sector as it will enhance the quality of Government services delivery. DSM can help by calibrating measurement instruments to ensure uniformity across the country and thereby the equal enforcement of laws, rules, and regulations. For example in the transport sector, axle weight limit enforcement is critical to avoid road damage from overweighted trucks. Therefore, each of the 17 provinces of Lao PDR has two weigh bridges to enforce existing laws. However, the private sector reports irregular enforcement as some trucks are within existing weight limits on one scale but overweighted on the other. The deviation between weigh bridges is sometimes as large as several tons. Therefore, the impact of calibrating instruments, while often underestimated, is of critical importance to the private sector.

### **II.1.3 Institutional framework**

The DSM under the Ministry of Science and Technology (MoST) is the lead agency for NQI. Both the Department and Ministry were newly formed in 2012 and succeed the Department of Intellectual Property, Standardization and Metrology of the former National Science and Technology Authority (NSTA). DSM is now the leading authority in the area of standardization, metrology, accreditation, conformity assessment and related activities. In addition to supporting these highly technical specific activities, DSM's mission is to provide a host of credible technical services that support Lao innovation and industrial competitiveness by advancing measurement

science, standards, and technology in ways that will contribute to the economic development of the country, improving the health, safety, environment and the standard of the Lao people.

#### **II.1.4 Past support and achievements**

There has been extensive support in SPS-related areas over the past decade such as food safety, animal health, plant health, and specific interventions to avoid the spread and control of global animal diseases (i.e. highly pathogenic avian influenza – HPAI, foot and mouth disease, etc.). Presently, the Asian Development Bank (ADB) is in the process of implementing a comprehensive SPS program, including extensive capacity building activities. However, to date little work has been done in the field of standards. It is expected that this program will also have spill-over effects for this project activity as both SPS and TBT standards are closely related.

In the area of quality infrastructure, external support over the past 5-10 years, mainly provided by United Nations Industrial Development Organization (UNIDO), has been small and focused on aspects of standardization, metrology, and upgrading Food and Drug Quality Control Center capacities. The USAID LUNA project contributes legal texts for compliance with WTO requirements and related training, and the Trade Development Facility (TDF) has worked on capacity diagnostics and a strategic plan for the DSM. Various donors have supported TBT training under the ASEAN framework. The TDF supported a “Capacity Assessment and Action Plan in TBT” which has been delivered in July 2011. The assessment notes serious shortages in staff and funding for all quality infrastructure areas under the mandate of the former Department of Intellectual Property, Standardization and Metrology. Although legal texts have been added and upgraded, there is still no consistent legal framework for TBT that meets general principles of good legislation. With UNIDO and Vietnamese support a National Metrology Institute (NMI) has been established more than five years ago. A significant part of the staff in the former NSTA has been allocated to NMI, but the institute lacks the financial resources to become effective.

#### **II.1.5 Challenges and issues**

There are four distinct challenges in the present NQI:

1. Lack of awareness among the private sector and Government agencies,
2. Low levels of technical skills and equipment,
3. Lack of an effective coordination mechanism between DSM and line ministries, and
4. Limited private sector capacities to manage quality issues.

(i) There is a general lack of awareness among the private sector and some Government agencies about the importance of international standards and certification requirements. As some Government agencies are not aware of the benefits of utilizing international standards, the country is also lagging behind in the implementation. This is further impeded by the relatively small budget of the Government to accomplish a relatively large task.

(ii) Due to the slow implementation of NQI as well as human and financial constraints, many testing services and certifications are simply not available in Lao PDR. DSM lacks particularly

- Qualified laboratories to test and certify products,
- Trained technical staff,

- Hands-on experience in the field of measurement science (metrology),
- Required support for laboratory equipment and instruments,
- An established national accreditation body,
- Availability and use of international standards, and
- DSM's active participation in international and regional technical organizations.

(iii) Another major challenge is the lack of an effective coordination mechanism between line ministries with critical technical expertise and primary policy responsibility. The DSM has generic responsibilities in policy making for standardization, metrology and conformity assessment but there are major gaps in human resources and operational budget in both DSM divisions and NMI.

(iv) The private sector capacities for managing TBT are diverse and generally limited. There are still hardly any programs in which the public and private sector are actively cooperating. This finds its explanation in the lack of Government capacities to provide effective support and the basic operations of the private sector in Lao PDR.

#### **II.1.6 Bridging the gap with EIF funding**

Given DSM's limited human, technical and financial resources it will take a significant effort before Lao PDR can realize a system that effectively performs basic TBT functions. Given Lao PDR's small size in terms of trade volume, a national system cannot offer all services on a cost-efficient basis. The design of any national system, therefore, will always rely on the services offered at more advanced, neighboring countries and must be well-integrated regionally. As the capabilities of the present quality infrastructure in Lao PDR are very low, this project is the first stage towards the establishment of a NQI system.

Establishing such NQI will benefit both the export sector as well as the enforcement of standards in the domestic market. Provided this objective, DSM, as the responsible Government organization, must at the very least ensure access to international markets by enabling the use of international standards and technical regulations, guaranteeing reliable measurement, and setting up a system, in cooperation with neighboring countries, to allow accreditation of Lao PDR testing and certification facilities, so that the results of these bodies will be internationally recognized and accepted.

For instance, when exporting agricultural and food products, it is necessary at a minimum to demonstrate compliance with international sanitary, phytosanitary and safety standards. Other specifications must also be met such as those related to packaging and labeling. Building a quality infrastructure in cooperation with complimenting neighboring systems will enable Lao enterprises to meet the demands of a multilateral trading system and to ensure and prove that their products conform to international standards for both business buyers and regulatory authorities. This is a complex challenge that has to be met in several organizational dimensions, including the public and private sector sectors, academia, trade associations and other stakeholders. The involvement of the private sector is crucial to the overall success of a national quality program, as it is the ultimate beneficiary of such a program.

As part of developing Lao PDR's quality infrastructure, there is a need to access credible conformity assessment services. These are needed for a variety of purposes, including:

- Demonstrating that products, processes, services, commodities and personnel meet required specifications. These may include requirements specified under regulations (domestic or foreign), purchasers' specifications and trade agreements.
- Improving international trading opportunities by reducing technical barriers to trade and demonstrating compliance with international standard specifications, technical regulations and commercial specifications.

The NQI also supports the local industry and consumers as it helps enforcing quality standards in the domestic market (both locally produced products and imports). For example, the project assists the Government in enforcing domestic standards across a wide array of industries by calibrating measurement instruments across the country. The impact can be exorbitant as costs to the Government to provide public services can be very high due to lacking enforcement of domestic standards (e.g. enforcement of weight limits in road infrastructure).

Therefore, component A of the proposed project is intended to address the following challenges:

- Firms often lack the information to make educated choices and often fail to understand the impact of their choices on their selling capabilities. Building awareness of the importance of quality control and standards as well as upgrading firms presents a large challenge for many firms, particularly SMEs - they often lack the knowledge, expertise and resources to adopt and implement even minimum quality and standards. In addition, firms are often a large distance from their final markets (not only geographically but also logistically due to the involvement of various middlemen).
- At present, there is a lack of adequate financial, human and technology resources, especially when considering the complexity of the technical effort required. Therefore the overall objective of this project is to bring tangible improvements in the quality of Lao-produced goods and services, thus improving the quality of products being sold in the domestic market and facilitating access to more lucrative international markets, which will have a positive impact on trade balance. Implementation of the plan is also expected to contribute to consumer and environmental protection efforts.

## ***II.2 Justification for Component B: Supporting the Enhancement of Industrial Statistics***

### **II.2.1 Relevant Strategic Frameworks**

The following section highlights the relevant strategic frameworks and plans of the Lao Government for implementing component B of the project.

#### ***7<sup>th</sup> National Socio-Economic Development Plan (2011-2015)***

The NSEDP7 highlights the lack and/or inadequacy of statistical data which has severe implications for policy makers in the areas of poverty, agriculture, and industry and services. Statistics in Lao PDR lack accuracy and are not yet collected systematically. This leads to

- (i) Difficulties in monitoring and evaluating policies, particularly with regards to targets set by the Government in the three priority areas; and

- (ii) Difficulties in comparing national progress internationally and against global indicators.

The NSEDP7 aims therefore to strengthen the national statistics system by appointing sufficient numbers of statistics staff for collecting data and providing necessary information for analyzing and reporting on socio-economic development policies. It will further establish statistical units within MoIC and at local levels.

The key concrete strategy and measures for maintaining a high growth rate in the manufacturing industry and service and commerce sectors have been defined in the Trade and Private Sector Development Roadmap, guided by the NSEDP 7 and research for the DTIS. The roadmap is the program for the TPSWG under the Round Table process. As such, it is a living document in which Action Matrix priorities are linked to the overall results. The roadmap will be periodically updated and final indicators and baseline information determined.

The DTIS emphasizes clearly the need to improve the compilation of statistics for the manufacturing sector in order to assist in assessing the state of the sector and the formulation of appropriate support policies. In addition, the DTIS aims to improve macroeconomic management through enhancing the compilation of trade and industry data. Key agencies driving this process are the MoIC, Ministry of Planning and Investment (MPI), Ministry of Finance (MoF), and the Bank of Lao PDR (BoL).

#### *Strategy for the Development of National Statistical System, 2011-2020*

The Strategy for the Development of National Statistical System 2011-2020 was developed and approved by the Lao Government in 2010 and involved key stakeholders from the various ministries and Government agencies. The strategy is particularly aligned with the NSEDP7 and some other relevant national development programs and international commitments. It covers the entire National Statistical System (NSS), targets statistics needed to monitor and evaluate the poverty reduction strategies, proposes to address legal and institutional issues, and identifies technical assistance and training needs.

### **II.2.2 Overview of the existing industrial statistics**

In order to produce credible and well-targeted policies, strategies and programs for sustainable development, policies must be coherent, predictable and harmonized with the broader strategic frameworks and objectives. To formulate such policies, strategies and programs, timely, consistent, and comprehensive statistical information as well as high quality research and analysis is needed. Such information and research will contribute to efficient resource allocation and effective policy making aiming at increased productivity and competitiveness, including the development and promotion of manufacturing SMEs, for environmentally, socially and economically sustainable growth.

Because of the accelerating dynamics of socio-economic development and the increasing complexity of information technology, quick, decisive and relevant decision making on solid factual grounds is of added significance. In this regard, statistical information is of prime importance because it is quantitative and enables objectivity and comparability.

The Lao statistical system is highly decentralized with a limited inter-agency coordination and technical capacity. Statistical information is collected by both the Lao Statistics Bureau (LSB) for general statistics as well as other ministries and Government agencies for industry/sector specific data. The NSS suffers generally from limited

- (i) Technical capacity causing delay in the full adoption of the System of National Accounts (SNA) 1993 and a piecemeal approach in conducting household surveys;
- (ii) Analytical capacity which further constrains the full use of statistics;
- (iii) Coordination and institutional capacity of LSB to lead the production of national statistics in highly decentralized system among various Government agencies at various levels (districts, provinces, center).

Lack of effective coordination within the NSS is one of the major constraints to produce quality and timely statistics on the national level. In addition, regulatory and related business-processes for data-sharing produced by LSB and other ministries/Government agencies for public access hinder and greatly reduce the efficiency of the NSS to match demand and supply. In addition to internal difficulties in producing statistical information for policy, the LSB has to cope with technical difficulties such as:

- (i) A large informal sector and the limited availability of relevant administrative records;
- (ii) Incomplete sampling frame or business register and in updating the frame so it can be used in establishment/enterprise surveys; and
- (iii) A low response rates to survey questionnaires.

For example, the most recent reference year for data on structural industrial statistics is 1998. Since then no detailed data has been compiled, mainly due to the shortage of human and financial resources available at LSB.<sup>5</sup>

Sector-specific statistical information is collected by the ministry/Government agency related to that area. Some of the data collected is submitted to the LSB to produce annual statistical reports and analysis. However, the information collected by the responsible Government agency is much more detailed than the data used by the LSB.

Statistical information on the industrial sector specifically is under the responsibility and collected by the MoIC. The data produced goes beyond the data submitted to and published by the LSB as it includes more detailed and firm-level data.

### **II.2.3 Institutional framework**

The LSB is the national statistics body of Lao PDR and responsible for the production of national and sub-national statistical data. Various ministries, departments, and specialized

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<sup>5</sup> Currently, LSB has only one systems analyst, one hardware specialist, two programmers and a few professional economic statisticians. The platform of its software system is SQL. The software being used is SPSS, Excel and Stata.

agencies provide data and statistical information to the LSB, who collects and publishes this information and produces analytical work. Depending on the area of data, the data collection is often done by the respective line ministry at the provincial level. The line ministry then collates all collected data and submits it to the LSB. Institutionally the LSB is located at MPI.

Statistical data concerning industrial development is provided by the DoIH at the MoIC. The actual data collection takes place at the provincial Departments of Industry and Commerce.

#### **II.2.4 Past support and achievements**

In the past, much support for the Government of Lao PDR in building the statistical system has been received from the Government of Sweden through the Swedish International Development Agency (SIDA). SIDA was active for almost two decades (1991-2009) and phased out its support in Lao PDR in 2010. Key outcomes of the project was a significant capacity improvement of the Department of Statistics, including in the organization of population and other censuses; the implementation of sample surveys; the analysis of census and survey data and production of basic reports; the national account statistics based on the SNA 93 standards; the use of international classifications; supported the acquisition of and capacity to use modern ICT; improved the management and planning; and improved the English proficiency of many staff members.

In addition, the Government of Lao PDR has taken important measures to upgrade the legal, regulatory and institutional framework with various laws and decrees, for example:

- (i) *The first Lao Statistical Law (June 2010)*  
This law elevated the status of the DOS to a higher level with an independent status and renamed it to “Lao Statistics Bureau”. The law made LSB responsible for the production, management, coordination and dissemination of statistics in the country.
- (ii) *The Prime Minister’s Decree on Institutional Set-up and Functionality of LSB (February 2011)*  
This authorized LSB to coordinate the production and consolidation of the national statistics and indicators and to be accountable for the publication and dissemination of the data.
- (iii) *The Prime Minister’s Decree for implementing the Statistical Law (June 2012)*  
This provides a clear guidance for LSB and line ministries and provinces to fulfill their mandate including role and responsibilities of each agency; mutual commitments to produce and share data among Government ministries; strengthening of coordination mechanism; staffing and statistical capacity building at all levels.

Also, MoIC has built the capacity of its statistical units to improve the availability and quality of industrial statistics. For example, with the help of UNIDO, a statistical system was successfully set up in the previous Ministry of Industry and Handicraft. However, in the beginning of the 2000s, the Ministry was merged with the Ministry of Commerce to what is now the MoIC and the statistical system was transferred to the Ministry of Energy and Mines. Therefore, a new statistical system has to be built.



The sampling frame (business register), maintained by LSB, was re-established by employing relevant information derived from the 2006 Economic Census, which was conducted in 2006 with financial and technical cooperation from SIDA. According to the census, there were 126,913 enterprises and establishments (or, simply, economic units), of which 24,331 (19.2 per cent) were manufacturing units.

Based on this sampling frame, LSB conducted an Enterprise Survey in 2007. The information contained in the sampling frame has not been updated regularly since then but the economic census questionnaire covers all items that are generally required for a sampling frame for enterprise/establishment surveys.

### **II.2.5 Challenges and issues**

The importance of timely statistical information and high quality analysis for effective policy making and intended policy outcomes are recognized by the Government of Lao PDR. However, to date the capabilities of the Government to collect statistical information and provide high quality statistical analysis is low.

Major challenges the Government is facing in general are that statistics are collected unsystematically, meeting the demand inadequately, and lack the accuracy needed for proper policy formulation as well as policy monitoring and evaluation. Consequently, the results (of policies) cannot be properly measured against targets and Lao statistics are not comparable with international indicators and statistics.

Similarly to the LSB, the statistical unit within the DoIH suffers from

- (i) A decentralized data maintenance without a well-coordinated data exchange system within the MoIC;
- (ii) Ad-hoc data acquisitions in many cases for specific data needs and hence non-existence of a system for regular data-updating; and
- (iii) A limited capability of the staff to identify and use appropriate statistical indicators and techniques in a systematic, analytical framework for a specific policy purpose.

Problems relating to the unavailability of macro and meso data on structural industrial statistics, which are prerequisites for the comprehensive, comparable, consistent and action-oriented empirical analysis of Lao industry, were detected

- (i) Through the needs-assessment survey (UNIDO project no. XP/RAS/10/007); and
- (ii) On the basis of the data (and related metadata) on Lao structural industrial statistics reported by the LSB to UNIDO in 1998.

The capacity and capabilities of the Provincial Departments of Industry and Commerce is low due to the lack of human and financial resources. Data collection is without a systematic and consistent approach that leads to poor data quality and comparability nationally as well as internationally. Also the institutional capacity within the statistical unit of MoIC to produce reliable data on structural industrial statistics is presently at a very low base.

Due to a lack of institutional structure, data is collected and kept across different organizational units of MoIC, MPI, and other public and private institutions dealing with specific industry information. The poor data collection and statistical analysis capacity greatly affects the

Governments policy making as well as policy monitoring and evaluation capacity. Government decisions and monitoring of the effects of policies are often based on insufficient statistical data and poor statistical analysis and research. Furthermore, since data is not collected consistently and systematically, it neither can be compared nor benchmarked both nationally and internationally.

### **II.2.6 Bridging the gap with EIF funding**

For effective policy making, project component B will address

- (i) The current decentralized data maintenance without a well-coordinated data exchange system within the Ministry;
- (ii) The absence of a system for regular data updating and the resulting ad-hoc data acquisition for specific policy needs;
- (iii) The limited capability to identify and use appropriate statistical indicators and techniques in a systematic analytical framework for a specific policy purpose
- (iv) The lack of industrial data.

To formulate comprehensive industrial development policies and strategies including the promotion of SMEs and the manufacturing sector, both core statistics such as detailed industrial performance-related statistics as well as structural statistics such as production, employment, investment and external trade is required. In addition, comprehensive qualitative information relating to environmental, social, demographic and market aspects is needed to support quantitative analysis.

In order to strengthen the statistical infrastructure for policy purposes, it is essential that regular enterprise/establishment surveys of industry (hereafter referred to as ‘industrial surveys’) are implemented in accordance with international standard methods. This will enable the production of key structural industrial statistics and short-term statistical surveys for the production of sub-annual indexes of industrial production based on a complete and up-to-date register of establishments. Such data is urgently demanded by MoIC, MPI and other national and international public agencies dealing with economic and industrial development, manufacturers and business people, and potential foreign investors. Therefore, an industrial survey is planned already during the first year of the project.

In addition, the project aims to introduce IT and increased national data processing capabilities to its headquarters and 16 provincial offices. This will enable the harmonization of national, sub-national and international data files that are presently fragmented over various sources and entities. In addition, this will be a stepping stone for building an integrated statistical database system (or, central statistical information center) within the Ministry. However, the development of such a centralized database system will require close collaboration with the LSB and other domestic and international statistical data sources as data and other statistical information needs to be collected regularly using specific methodologies. For the design and organization of the database system the expertise and input from external specialists will be required. Eventually, the database system is expected to generate a comprehensive set of analytical indicators relevant to consistent country analysis in order to enable effective policy making and monitoring.

Within this project component, the primary beneficiary is the DoIH at the MoIC and related provincial Departments and Offices. The LSB only indirectly benefits from this project through greater data quality and consistency supplied by the MoIC. Besides, LSB receives assistance through a World Bank project aiming at strengthening the national statistical capacity.

## SECTION III: PROJECT DESCRIPTION

### *III.1 Objective*

Primary objectives of the project are: 1) to strengthen the national quality infrastructure (component A); and 2) to support the enhancement of industrial statistics (component B), thus contribute to increasing quality, safety and reliability of Lao products and services, and improving overall competitiveness of Lao businesses.

### *III.2 Project components*

The proposed project will primarily support implementation of two intervention areas:

- A. Strengthening the national quality infrastructure that enable Lao businesses' full participation in international trade, and
- B. Supporting the enhancement of industrial statistics

Both intervention areas are strategically aligned with pillar 1 of the Trade and Private Sector Development Roadmap (Action matrix of the DTIS Update) – conducive domestic and international trading and investment environment created by promoting international and regional trade integration; improving trade facilitation; SPS, TBT, and the business enabling environment.

The two project components are described below in greater detail.

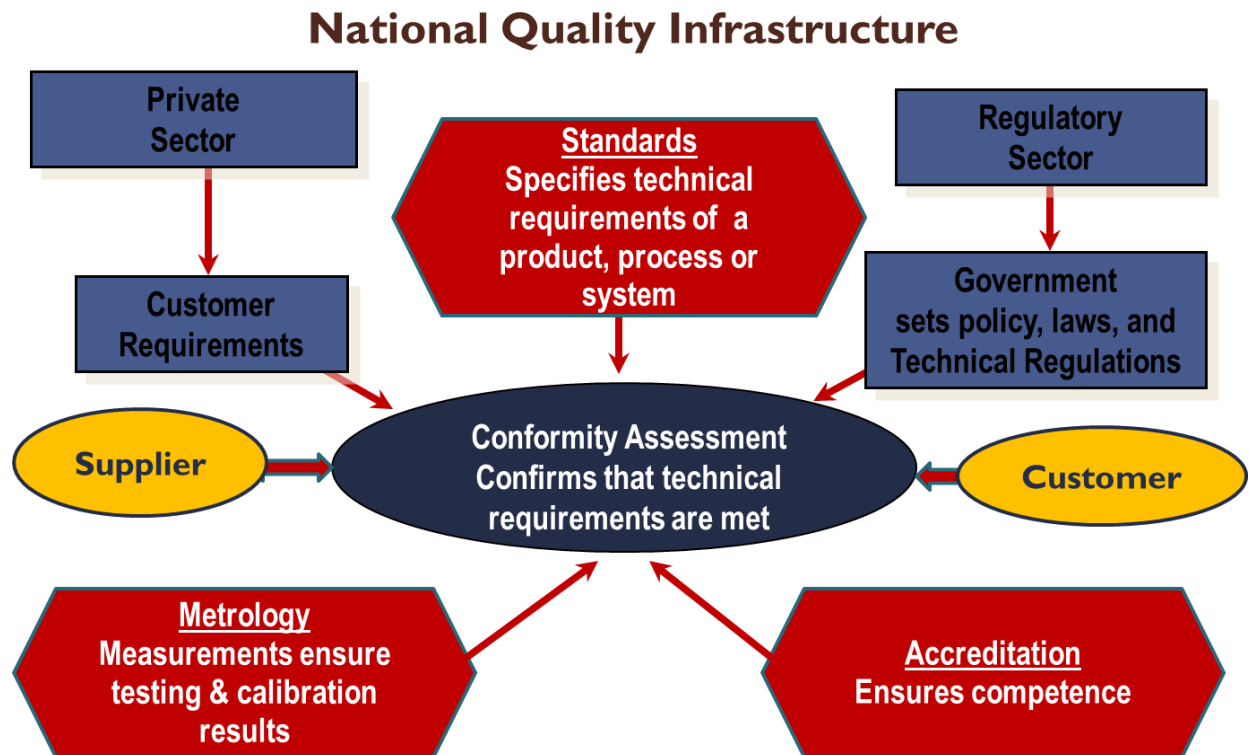
#### **Component A:** Strengthening the National Quality Infrastructure in Lao PDR

The NQI component is designed to support the implementation of the first National Strategic Plan for Quality Infrastructure, consisting of:

- (i) Technical assistance to building the national standardization system;
- (ii) Developing a national metrology system to ensure the uniformity and traceability of measurements;
- (iii) Technical infrastructure for accreditation;
- (iv) Achieving mutual recognition of accreditation and certification results; and
- (v) Creating private sector awareness of the importance and benefits of implementing international quality standards.

Metrology, standards and conformity assessment are three separate but interdependent and interlinked “pillars” of knowledge, which are essential first steps for Lao PDR to develop a quality infrastructure that enables sustainable development leading to full participation in international trade, and eventually to satisfy the technical requirements of the multilateral trading system. These activities provide a vital link to global trade, market access and export competitiveness, as they contribute to consumer confidence in product safety, quality, health and the environment.

**Figure 1: Overview of a National Quality Infrastructure**



Metrology, standards, accreditation and conformity assessment are vital to products and manufacturing processes, although consumers are not always aware of it. Yet these same consumers often use quality marks from product certifiers as a guide when making purchasing decisions. Each and all of the quality infrastructure components are essential to production and trade, and they are closely related. The rules and procedures for these components are established by eight independent international organizations, each unique in their own way.

Lao producers must ensure that their exported products comply with stated requirements, whether they are standards, technical regulations or contractual obligations. Capacity building in this context is largely focused on the capabilities of the testing, certification and conformity assessment capacity of DSM. Lao products must meet or exceed the requirements of regional and international standards.

The NQI component will primarily support implementation of four key components of the National Quality Strategy, namely standardization (A.1), metrology (A.2), accreditation (A.3) and a quality center (A.4) located in Champasack the South of Lao PDR. In addition, a critical task within this component A will be the formulation of a plan on how to use potential future revenues. This activity can only be completed once private sector demand for DSM's services can be properly assessed. Also, it is expected that DSM will be able to generate revenues from "selling" accreditations to other domestic and foreign Government agencies and private sector firms. However, the potential is difficult to assess at present. Further, the Government is committed to developing the NQI. However, given the long time-frame of the project no decision

on the exact amount of the commitment has been made yet. The operational and investment budgets allocated to quality infrastructure are however expected to increase in the near future due to increased pressure on the Government for promoting economic diversification from the natural resource sectors and enhancing the competitiveness of non-resource sectors.

### ***Subcomponent A.1: Standardization***

Standards and norms provide a vital link to global trade, market access and export competitiveness. In expanding trade, in particular, standards and technical regulations are essential for market access. Voluntary and mandatory standards and technical regulations define what goods and services can be exchanged, and outline the procedures under which such exchanges are permissible. Standards and norms serve as reference points that are used in the context of contracts or international trade on which commercial transactions are based. They also represent a level of technical expertise and technology, and are used by industrialists as indisputable definitions that simplify and clarify contractual relations between economic partners.

Activities are designed to address key issues including:

- An urgent need for baseline standards that Lao producers can put into practice in the short term.
- The lack of capacity to participate in international standardization activities including local technical standards committees.
- The lack of capacity to deal with "political issues" around standardization.
- Lobbying with key players in Lao society.
- Understanding WTO-TBT and SPS issues and providing sound advice.
- Acting as technical advisors to ministries involved in trade and trade negotiations.

### **Results/Activities**

A major expected result of this subcomponent is the adoption and implementation of the WTO TBT Code of Good Practice for Standardization through the implementation of the following key activities:

- Establishing procedures for the preparation, adoption and application of standards in accordance with the WTO-TBT Agreement.
- Producing a written procedure for adopting international standards and developing national standards.
- Participating in the major activities of regional and international standard organizations.
- Developing procedures for the creation of technical committees on standardization and to coordinate the activities of these committees.
- Promoting public awareness of the benefits of implementing international standards through channels including workshops and seminars.
- Train relevant stakeholders.
- Participating in the TBT committee meetings at the WTO in Geneva (2-3 staffs).

### ***Subcomponent A.2: Metrology***

There is an increased global understanding of the importance of metrology to the economy and to society as a whole. Accurate measurement forms the backbone of technical regulations, documentary standards and legal metrology. It is the prerequisite for free and fair national and international trade. In every institute, company, or organization, concepts such as safety, security, efficiency, reliability and precision are of paramount importance to designing systems that provide guarantees of product quality. Accurate and widely accepted measurements are important to ensure that market transactions can take place and that consumers can feel confident that the goods they buy are of the quantity and quality they expect. Importantly for Lao PDR, accurate and internationally accepted measurements allow market access for food and commodity exports. Accurate measurements curb the buyer's tendency to want more and the seller's tendency to give less.

The metrology subcomponent of the project will primarily support the Metrology Institute in performing its key functions, including the provision of reliable, credible calibration services that meet industry needs and support legal metrology activities.

The national metrology institutes are responsible for the dissemination of traceable primary reference standards and the nationwide calibration of testing laboratories. The metrology institutes provide industrial-level service for testing and inspection laboratories (e.g. food testing laboratories) as well as to industry. Traceability is established by calibrating measurement instruments and the national metrology institutes must be able to verify that the measuring instruments used in calibration and testing laboratories are accurate. Therefore, one national reference standard must be established and all measurement instruments calibrated to that standard (in order to ensure uniformity of measurement instruments across the country). The measurement instruments include equipment for one or more specific quantities (e.g. for mass, length, time, electric current, and temperature). In order to carry out those functions, some equipment needs to be purchased and/or upgraded. For example, weights for measuring masses need to be available in each province to establish such a nationwide reference standard. Therefore, more weights (17 sets/one set for each province) need to be purchased. The temperature calibration capability is limited at present and needs to be expanded.

Some calibrating measurement instruments are not needed permanently in every province. Therefore, such equipment does not need to be purchased multiple times especially considering the high costs. However, in order to enable the metrology institute rolling out its tasks across all provinces the instruments must be transported to the respective sites. As the Metrology Institute presently does not have a vehicle, one vehicle is requested to transport the equipment (size of a mini-van or similar to fit the equipment).

### **Results/Activities**

The expected result of this subcomponent is the development of a national metrology system to ensure uniformity of measurement across Lao PDR and the traceability of measurements to the international system of units, to improve the quality of products and services and to support international trade through the implementation of the following key activities:

- Developing a quality system manual for DSM laboratories.

- Developing and implementing a procedure for the maintenance and re-calibration of laboratory instrumentation.
- Establishing the traceability of measurement for national reference standards.
- Establishing a program to upgrade measurement standards.
- Supporting DSM participation in international metrology organizations.
- Providing training related to the implementation of the national metrology system.

### ***Subcomponent A.3: Accreditation***

Accreditation is the internationally recognized procedure for demonstrating the competence of a laboratory or certification body to carry out a specific task. Establishing an accreditation system based on international standards and guidelines is linked to a membership of the International Laboratory Accreditation Cooperation (ILAC) and the International Accreditation Forum (IAF). Mutual recognition arrangements will provide assurances to trading partners that those suppliers of testing and certification are competent.

DSM does presently neither have the resources nor the expertise to establish a fully operational national accreditation body. Although at present there is not a large demand for accreditation in Lao PDR, it is crucial to enable firms to access foreign markets, and to reduce barriers to trade and logistics costs. Since demand will be mainly for selective services, DSM proposes to use a combination of national and neighboring foreign national accreditation providers, backed up by the accreditation activities of the ASEAN Consultative Committee on Standards & Quality. The private sector will need to provide guidance to DSM on which services should be offered domestically and what services should continue to be offered abroad taking into account demand and a cost-benefit analysis.

As envisaged in the Quality Infrastructure Strategy, DSM will set up the Lao National Accreditation Bureau (LNAB) as a small basic operation for national needs. The LNAB will operate as a focal point for the coordination of accreditation activities with the National Accreditation Bodies of Vietnam and Thailand, which are already ILAC-, MRA- and/or IAF- or MLA- recognized.

### ***Results/Activities***

The key result of this subcomponent is to develop the capacity of DSM – particularly LNAB – in the provision of reliable, credible voluntary accreditation services for a fee that meet industry needs and that are in compliance with international standards and guidelines.

To achieve this objective, the proposed project intends to support DSM in implementing the following key activities:

- Formally establishing the LNAB in accordance with ISO/IEC 17011.
- Obtaining all ISO/IEC accreditation standards and guides.
- Creating awareness of the benefits of accreditation and the mandatory requirement for WTO-TBT compliance.
- Supporting application for membership of IAF and ILAC and becoming a signatory of the ILAC and IAF mutual recognition agreements.
- Implementing short-term alternatives to achieving mutual recognition.



- Developing and training a core group of qualified accreditation assessors.

#### ***Subcomponent A.4: Quality Center***

The ability to ensure quality (and the reputation that is built with it) is a vital part of any organization's long-term success. The introduction and use of international quality standards has become a prerequisite for market access. Quality management standards such as ISO 9001 have become a global benchmark for Quality Management Systems (QMS). This international standard is used as a framework for providing assurance about a supplier's ability to meet customer requirements. For example, ISO QMS standards are often a market requirement to participate in supply chains or to bid for procurement contracts. It is also widely used as a marketing tool by companies selling goods and services to consumers.

The DSM Quality Center has been created to provide a host of defined services to SMEs and other Government agencies. These services will include:

- Providing consulting services, and conducting workshops for the private and public sector to prepare them for achieving QMS System Certification such as ISO 9001 that has international acceptance and recognition.
- Training for the development of quality manuals and the implementation of QMS including ISO 9001, 14000 and 22000.
- Developing a series of quality seminars and workshops for SMEs.
- Implementing the Lao National Quality Award.
- Assisting SMEs to obtain a Lao National Standards Mark for their products.
- Supporting the effective operation of a science-based quality control laboratory in Champasack.

Moreover, the Center aims to provide

- Internship opportunities in all relevant areas to all interested parties to develop qualified human resources to meet internal and external demands for qualified personnel in all MAS-Q areas (part of the institutional strategy).
- Technical support to a Science-based Quality Control Laboratory in Champasack by training technicians from Government and business to be certified and accredited agricultural commodity surveyors and inspectors. Once certified, these technicians will be audited by the same accrediting organization to ensure the continuous professional inspection of food and agricultural exports from Lao PDR through Champasack, and certified technicians would work side-by-side to handle export documentation and facilitate the inspection of commodities for export.
- Additional technical support to Champasack Provincial Industry and Commerce Office and other relevant offices to coordinate and operate a food safety, quality control, and sanitary standards outreach program aimed at raising the awareness and training of key local actors in the agricultural commodity supply chain. The outreach program will draw on resources from nearby Ubon Ratchathani University's Faculty of Agriculture, Department of Food Technology, through an existing memorandum of understanding with Champasack University to train professors and lecturers as

trainers. The subcomponent will support other food and bio-safety training and awareness-raising activities, with special courses for members of trade, production and export associations in Pakse and at individual companies, and for independent traders, commodity aggregators and product consolidators.

### Results/activities

The immediate result of this subcomponent is to ensure the full operation of the National Quality Center and Science-based Quality Control Laboratory in Champasack province through the following main activities:

- Conducting a national quality needs assessment.
- Developing an operational plan and providing necessary human resource development support, including training for the Quality Center and Science-based Quality Control Laboratory in Champasack.
- Developing and implementing a national quality award system.
- Creating a library of ISO, quality standards and publications.
- Conducting demand driven training and workshops on international and national quality standards.
- Providing technical training on commodity survey and inspection.
- Supporting the implementation of a food safety, quality control and sanitary standards outreach program aimed at raising awareness.
- Supporting food and bio-safety training and awareness-raising activities.

### **Component B:** Supporting the Enhancement of Industrial Statistics

At present, the statistical unit responsible for industrial statistics of the MoIC, the DoIH is only minimally equipped with statisticians and IT staff, has old equipment at its disposal, and has no established system to import, maintain and process statistical information. As a consequence, statistical information is only fragmentally available and inadequate for the formulation of viable policies, strategies and programs for sustainable, coherent and consistent industrial development of Lao PDR. Access to information is limited and frequently not comparable in terms of coverage, classification, concept and valuation.

The component “supporting the enhancement of industrial statistics” provides technical support to developing a central industrial statistical information system within MoIC to enable policy makers to formulate, monitor and evaluate industrial development policies. This part consists of two elements: (i) capacity building/training of staff and some enabling equipment, and (ii) an industrial survey.

In order to strengthen the statistical infrastructure for policy purposes, an industrial survey is planned during the first year of the project in accordance with international standard methods. It is expected that the survey results will enable the production of key structural industrial statistics. This study will contribute to the planned production of sub-annual indexes of industrial production based on a complete and up-to-date register of establishments as such data is urgently demanded by MoIC, MPI and other national and international public agencies dealing with economic and industrial development, manufacturers and business people, and potential foreign investors.

The capacity building component will provide the necessary training to the IT staffs of DoIH. A key goal of this exercise is to raise the capacity of the staff involved in data collection, data analysis and the application of survey tools. It will particularly address data collection challenges relevant to the Lao case such as

- Incomplete business register and (present) sampling frame;
- Limited availability of relevant administrative records;
- High informality of the private sector; and
- Low response rates of the private sector to survey tools such as questionnaires.

The industrial survey, conducted by UNIDO, supports the capacity building element as the statistics staff of DoIH will be heavily involved. The survey will be used as a learning opportunity for the staff directly involved in data collection and data analysis under the guidance of international experts on how to conduct a proper industrial survey in a challenging environment such as in rural areas of Lao PDR. This learning experience is supported by a professional training on practical application of data collection, data analysis, and survey tools. An additional benefit of the survey will be an updated sampling frame which assists future data collection and address some of the present data challenges.

### Results/activities

There will be two expected outcomes of this component:

- (i) To enhance the institutional capacity of the MoIC/DoIH to carry out policy-oriented statistical analysis of the country's manufacturing sector in accordance with international standard methodologies, by
  - establish within MoIC/DoIH a central statistical information system to support: (a) the Department's analytical capability for consistent policy formulation for and monitoring of the country's sustainable industrial development; and (b) its external information service. The system should contain all internally and externally available statistical information relevant to this purpose, and
  - training analysts and IT staff how to maintain the system, carry out policy-oriented analysis, develop required statistical indicators and apply statistical techniques. The training is planned during the second year of the project.
  - training for key staff on how to conduct an industrial survey (see next bullet point). The training is planned to be part of the industrial survey. Participants should be staff directly involved in data collection and data analysis.
- (ii) Enhanced policy making capabilities due to better data availability through the industrial survey.

As part of the capacity building element, the target staff members of the DoIH are expected at the end of the project to be fully aware of the statistical concepts used internationally for sustainable industrial (and general economic) development, and the necessary country analysis needed for systematic formulation of integrated development policies and strategies. Consequently, they will be capable of identifying and developing required statistical indicators

and methods. In addition, the statistics units are expected to improve their knowledge of international standard methodologies in industrial statistics that would be required for future annual industrial establishment surveys.

The project will also generate a permanent operational system run by MoIC/DoIH to maintain (i.e., to update daily/frequently and whenever relevant statistical information becomes available) statistical data files and supporting metadata. This system, which will be an integrated/centralized database system, is to support the daily work of DoIH and other Government units on the socio-economic analysis of the country, aiming at those objectives stated above.<sup>6</sup> The set of statistical indicators has to be prepared and stored in the statistical system. The data set is expected to be updated and expanded regularly after the project by the responsible department staff.

Based on the consistent statistical information available in the system and relevant non-statistical information available elsewhere, DoIH will be in a position to objectively monitor Lao PDR's industrial development, and be able to carry out policy-oriented analysis for systematic and sustainable industrial development.

To achieve the above outcomes, the project will

- (i) Develop staff and system operators at DoIH who are highly capable in statistical and analytical data development, and the policy-oriented empirical analysis of the country's sustainable industrial development;
- (ii) Create relevant software systems at DoIH; and
- (iii) Conduct an industrial survey.

To support the efficiency of the central statistical system and to meet data demands from domestic and foreign data users, LSB is expected to produce useful statistical information about the structure and characteristics of the Lao manufacturing sector based on the outcomes of the 2007 Economic Census and on future establishment/enterprise surveys. Since LSB relies on DoIH at the MoIC to supply such data, an industrial survey will be conducted in the first year of the project. The budget for this activity highly depends on the size of the survey and related staff needs, training needs of staff, and logistical effort. To date, the concept paper for the survey is yet to be developed and the exact implementation details to be determined. The budget provided of USD 100,000 is therefore a maximum amount.

Other project activities include:

- On-the-job training, learning by doing, group training, and ad-hoc internal workshops through all project activities.
- Identifying analytical indicators and their data sources (together with LSB and MoIC), and arranging regular acquisition of those data.

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<sup>6</sup> Setting up this system requires not only working on software issues. Some of the hardware especially in provinces and districts might need to be updated, where lacking or out of date. Priority will be given to provinces where hardware is lacking or where the hardware does not support the system requirements. The need will be identified in an initial assessment at the beginning of the project.

- Developing concepts and methodologies for data maintenance and analytical applications for policy recommendation and monitoring industrial development in Lao PDR.
- Designing the database system, development, installation and application of relevant software.
- Developing a prototype software system to maintain the LSB business register, to:
  - ✓ Edit data reported by individual establishments;
  - ✓ Derive data on value added, and other derived statistics;
  - ✓ Tabulate these data at macro and meso levels; and
  - ✓ Produce derived indicators for dissemination.
- The methodological development of the framework that is based on theories of growth, productivity and industrial economics, and consideration of environmental, social and demographical factors.
- Constructing a list of the statistical indicators that could be produced and relevant to action-oriented empirical analysis of the manufacturing sector, and developing software to calculate and tabulate those indicators. Preparing and tabulating those indicators for the country and for selected country groups (e.g. ASEAN) for international comparison, and other purposes.

Where necessary, DoIH and LSB will cooperate and exchange information. The information exchange could take place by inviting LSB staff to related information events and trainings. Areas for technical cooperation within the industrial statistics operations are:

- In the possible modification of the annual establishment survey questionnaire in accordance with the 2008 International Recommendation for Industrial Statistics and the ISIC (Revision 4).
- Technical solutions for a reliable connection between LSB and the new DoIH statistical information system.
- Support to the development of software for maintenance and sharing of the LSB enterprise-establishment register.

### ***III.3 Preparation of the EIF Tier 2 project***

Preparation of the project proposal was guided by the Trade and PSD Development Roadmap – Action Matrix of the DTIS Update 2012. The proposal was prepared by the National Implementation Unit (NIU) in close cooperation with the concerned technical departments. The NIU, led by its Director under the overall guidance of the Director General of the Department of Planning and Cooperation (DPC), and Mrs. Khemmani Pholsena, Vice Minister of Industry and Commerce and EIF Focal Point.

Prior to the preparation of this proposal, an intensive discussion and consultation process among MoIC and Development Partners/Donors took place concerning the need to initiate the first steps towards a strengthened quality infrastructure and enhanced industrial statistics. The TDF-1, which was completed by March 2013 and succeeded by the TDF-2 from April 2013 onwards, provides support in developing the Quality Infrastructure Strategy (see also Section I).

This Quality Infrastructure Strategy will serve as a main reference to guide future projects in the area of NQI, including EIF-funded projects. The Quality Infrastructure Strategy was prepared by DSM with the technical input and support from international TBT consultants. Based on this strategy, the draft proposal for strengthening NQI has been drafted by NIU with the technical input from DSM and international TBT experts working with DSM. The draft proposal on the enhancement of the statistical and analytical capacities of the Government for the formulation of industrial policies was prepared by the UNIDO technical team at request of DoIH. DoIH provided extensive input and comment for the preparation of this proposal.

Development partners/Donors have been involved during the proposal writing on an informal basis. In addition, an official Tier-2 Appraisal Committee (TAC-2) was held in February 2013 where both development partners/donors and other stakeholders involved provided comments on both the technical level as well as potential overlap and duplication of the project. The result of this meeting was the adoption of the proposal in principle by both the Government and Development Partners/Donors, represented through the European Union (co-chair of the TAC-2). After the TAC-2 meeting, two drafts of the proposal were shared again with Donors/Development Partners through the European Union. The comments received from this review have been incorporated in the final version of the proposal.

Particularly in the area of component A, there are various donors with expertise and broad interest in the area of strengthening the NQI such as GIZ, USAID and others. Their expertise and experience is very valuable in the implementation of the NQI strategy for two reasons:

- (i) The timeline for the activities under the proposed NQI strategy extend over a time period of five years while this project under EIF Tier 2 funding would cover a time period of three years (August 2013 – July 2016). Therefore, it is expected that some activities remain to be implemented, which could be financed/implemented with Development Partner/Donor support.
- (ii) Besides the proposed activities under the EIF Tier-2 funding there are potential complimentary activities that could be implemented to support the proposed project. Such potential activities are expected to be identified once the implementation of the proposed project commenced.

The overall project preparation process is briefly summarized as follows:

- An international TBT expert was recruited and worked closely with DSM and NIU in completing the Strategic Plan for the Development of NQI in early January 2011.
- An internal consultation meeting between the NIU technical team and the TBT expert was held in October 2012 to discuss the formulation of the Tier-2 proposal. The expert provided some inputs for the proposal.
- The NIU team started to develop a proposal based on initial inputs from the expert and submitted it for guidance and comments from the main implementing entities (National EIF Focal Point, MoIC; DSM, MoST; DoIH/MoIC).
- The first draft of the proposal was distributed to concerned stakeholders, Development Partners/Donors and other line ministries for comments and further

inputs. Since TBT issues are closely related with SPS, this draft proposal has additionally been shared with key SPS experts working in the region. Their comments have been taken into account in the formulation of subsequent drafts.

- The NIU incorporated comments and submitted the proposal to the EIF Focal Point. The EIF Focal Point reviewed and forwarded the revised draft proposal to the Trust Fund Manager (TFM) and the EIF Executive Secretariat.
- The NIU shared comments from TFM and EIF Executive Secretariat with stakeholders in Lao PDR and revised the proposal accordingly.
- The NIU organized the TAC-2 meeting to endorse the proposal in February 2013. In this meeting the proposal was adopted in principle.
- The draft version of the proposal was then revised based on the comments received from all stakeholders (implementing entities, Donors/Development Partners, other stakeholders). The comments were received on various drafts of the proposal during several rounds.
- Upon final endorsement by the TAC-2, the final document was signed by the National EIF Focal Point and the EIF Donor Facilitator and submitted to the EIF Executive Secretariat for formal transmission to the EIF Board.

### ***III.4 Summary budget***

***Table 1: Summary of the budget requested from EIF Tier-2 by Component/Sub-Component***

<b>Component</b>	<b>Budget request for EIF Tier-2 (USD)</b>
<b>Component A: Strengthening the National Quality Infrastructure</b>	
General activities	321,000
Standardization	330,000
Metrology	291,000
Accreditation	138,700
Quality Centre	312,200
<b><i>Subtotal:</i></b>	<b><u>1,392,900</u></b>
<b>Component B: Supporting the Enhancement of the Industrial Statistics</b>	
Enhancement of the Industrial Statistics	781,100
<b><i>Subtotal</i></b>	<b><u>781,100</u></b>

Project Implementation Support	346,350
<b><i>Subtotal</i></b>	<b><u>346,350</u></b>
<b><i>Grand Total</i></b>	<b><u>2,520,350</u></b>

**Table 2: Summary of the budget requested from EIF Tier-2 by Category**

Category	Budget summary (USD)
International Experts	788,250
Supporting Staff	18,000
National Experts	489,000
Travel and Missions	171,000
Subcontracts	135,000
Equipment	220,000
Professional Services	213,100
Communication	105,000
Sundries	51,000
Training and Workshops	330,000
<b><i>Total Funding Sought from EIF:</i></b>	<b><u>2,520,350</u></b>

**Table 3: Summary of the Government Contribution by Component**

	Component A	Component B	Project Implementation Support	Total
<b><i>Technical officers</i></b>	<b><u>USD 506,880</u></b>	<b><u>USD 126,720</u></b>	<b><u>USD 64,800</u></b>	<b><u>USD 698,400</u></b>
Number of officers	20	5	5	
Unit Cost*	1,408	1,408	1,440	
Number of Months**	18	18	9	



<b>Facility***</b>	<b><u>USD 18,000</u></b>	<b><u>USD 9,000</u></b>	<b><u>USD 1,800</u></b>	<b><u>USD 28,800</u></b>
Common Facility fee	500	250	50	
Number of Months	36	36	36	
<b>Office Space***</b>	<b><u>USD 108,000</u></b>	<b><u>USD 36,000</u></b>	<b><u>0</u></b>	<b><u>USD 144,000</u></b>
Rental	3,000	1,000	-	
Number of Months	36	36	36	
<b>Grand Total</b>	<b><u>632,880</u></b>	<b><u>171,720</u></b>	<b><u>66,600</u></b>	<b><u>871,200</u></b>

\* Average monthly salary. The average monthly salary is based on an hourly wage of \$8 and 8 working hours/day (average 22 working days/month).

\*\* It is expected that Government staff input for components A (DSM) and B (DoIH) will be roughly 50%, and at the NIU roughly 25%

\*\*\* Valuations for the facilities and office space are based on current market price estimations

### ***III.5 Sustainability strategy***

The primary focus of the proposed project is to develop Government capacity in the area of NQI (component A) and enhancement of industrial statistics (component B). The strong commitment of the Government to the project can be seen by the decision of the Government to adopt the first National Quality Infrastructure Strategy and the costed Government contribution to the project which amounts to close to USD 900,000 for both components. Such a high investment of the Government makes aborting the effort by the Government costly, especially in times of scarce budget resources.

#### ***Component A: Strengthening the National Quality Infrastructure in Lao PDR***

To date there are virtually no domestic qualified conformity assessment services in place to provide credible certification and the private sector has to obtain necessary certificates and standardization documents through a foreign, internationally accepted testing service. Such testing services come normally with a much higher logistical effort and are often associated with high costs. The consequence is a lower competitiveness of the exporting private sector due to higher market access costs. This contradicts present trade policy priorities. Having the NQI in place will enable already exporting firms to potentially attain necessary certificates and standards at lower costs/faster processing time/less logistical effort. Moreover, it is expected that it will also enable firms that do not serve foreign markets yet because of the lacking quality infrastructure, to explore business opportunities abroad.

The importance of a well-functioning NQI has been recognized by the Government with an extensive restructuring in 2012. The former NSTA was given Ministerial status (MoST) and the Department of Intellectual Property, Standardization and Metrology became two separate departments: Department of Intellectual Property and the present DSM. Today the newly established DSM is the leading authority in the area of standardization, metrology, accreditation, conformity assessment and related activities. In addition to supporting these highly technical specific activities, DSM's mission is to provide a host of credible technical services that support Lao innovation and industrial competitiveness by advancing measurement science, standards,

and technology in ways that will contribute to the economic development of the country, improving the health, safety, environment and the standard of the Lao people.

As outlined in Section III, the technical aspects of Component A will focus on strengthening existing mechanisms and thereby supporting the current structure i.e. through establishing guidelines, procedures etc. The sustainability aspect is further supported through (1) the transfer of knowledge from international technical experts to the technical staff in relevant departments and (2) through the generation of revenues from the services provided.

Knowledge is expected to be transferred by the engagement of international experts. National technical staff from units within implementing departments will work side-by-side and learn by doing under the supervision of the internationals. This development is complemented by extensive capacity building programs including workshops, seminars, on-the-job training, which are conducted to facilitate and support necessary membership applications in relevant international organizations.

The ADB is in the process of implementing a comprehensive SPS program. This program includes extensive capacity building activities. For instance, the program upgrades academic education for SPS specialists through improving quality of teaching at the Faculty of Agriculture at the National University of Laos (with some participation of the University of Health) covering curricula development, teaching quality improvement, and laboratory and teaching facilities upgrading. It is expected that this program will also have spill-over effects for this project activity as both SPS and TBT standards are closely related.

Accession to the various international organizations will also be an anchor for internal sustainability. International recognition boosts engagement and motivation and provides the necessary internal support to long-term sustainability. Special attention will also be paid to assisting relevant units and departments in developing and implementing their day-to-day operational procedures and long-term vision and mission statements.

To date, the present institutional structure is maintained through Government officers (as opposed to project staffs). Since the staff composition will not change much with this project<sup>7</sup>, the activities and operations are already mainly Government-driven. The Government is presently not planning to change the staffs structure and is not expected to do so, especially in light of the recent restructuring elevating the role of the MoST and DSM. In fact, due to the staffing challenges in the past, the Government aims to increase operational staff at DSM.

Sustainability also requires financial stability. Income is expected to be generated by three sources:

- (i) It is envisaged that by the end of the project DSM will be able to generate revenues from their operations. It will neither be advisable nor possible to offer all tests at a cost-efficient manner since each test requires different inputs in terms of equipment, method, and skills. However, since the focus of building a NQI will be based on the most needed services by the private sector that can be offered at a cost-competitive basis, there is a potential to generate significant income through testing fees, etc.

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<sup>7</sup> Within component A the project will install three full-time national coordinators helping to deal with the increased administrative demands and IT as well as part-time national and international experts.

- (ii) Once accredited by international organizations, there are also possibilities to further “sell” other accreditations to other domestic and foreign Government agencies, private sector firms, and others. This activity will not play a major role in attaining revenues but still can complement revenue generation.
- (iii) It is expected that all implementing departments will be able to secure an operational budget from the regular Government budget, especially once the private sector uses DSM’s services frequently. Further, the operational and investment budgets allocated to quality infrastructure are expected to increase in the near future due to increased pressure on the Government for promoting economic diversification from the natural resource sectors and enhancing the competitiveness of non-resource sectors.

### ***Component B: Supporting the Enhancement of Industrial Statistics***

The Government has recognized the importance of reliable statistical data and analysis. This is exemplified with the approval of the National Assembly of the first Statistical Law in 2010. This law elevates the status of the former Lao Department of Statistics to the Lao Statistics Bureau (LSB), an independent Government organization at the vice-ministerial level.

To strengthen the capacity of the LSB, a comprehensive project to strengthen the national statistical system is financed by the World Bank. Strengthening industrial statistics through this project will complement the activities supported by the World Bank as statistical data is collected through various mechanisms, often led by the different responsible line-ministries. For example, the MoIC is the primary responsible agency for the collection of industrial statistics and providing analysis on industrial development. Oftentimes it is the provincial offices of industry and commerce that represent the primary data collection points for industrial statistics in the respective province.

A key pillar to ensure sustainability is the capacity building component. It is expected that the higher capacity of the staff paired with a new statistical system in place both at headquarters and in the province will improve data quality and analysis significantly. In addition, higher staff capacity will make data collection and analysis less dependent of financial resources, especially by making use of local knowledge and the increased availability of online tools. The industrial survey conducted in the first year will immediately contribute to the better availability of data as well as enhanced staff capacity on how to conduct a survey in a challenging environment under the guidance of experienced, international staff.

The higher quality in collecting statistical data will ultimately benefit both the private and public sector. The private sector benefits through better information on specific industries and thus enables them to enhance planning of resources and inputs. It will also help the private sector to better gauge the industrial environment and markets they operate in. The public sector can support private sector development and entrepreneurship through better policy making by basing policy decisions on solid evidence. This in turn leads to a better business climate and will benefit the private sector in the long-run.

### ***III.6 Exit strategy***

For both components A and B, the exit strategy is very much interrelated with the sustainability strategy. Building the capacities in the respective departments/ministries is vital to ensure

successful continuation. From the project point of view, success is defined as the continued delivery of services to the private sector and Government that were initiated with this project. In general, for this a high level of ownership and increased capacities among Government staff is necessary. It is expected that Government staff will be able to increasingly carry out their respective functions with the ongoing project. By the end of the project, Government officers will be able to perform their duties in a responsible manner. Component-specific activities to achieve this are explained in greater detail in the following:

#### ***Component A: Strengthening the National Quality Infrastructure in Lao PDR***

In relation to component A, a series of Train-the-Trainer programs for specific senior staff of DSM will have been completed by the end of the project. These trained technical specialists are envisaged to be able to continue promoting the awareness and benefits of utilizing international standards and certification procedures among the private sector throughout Lao PDR. The equipment of the project such as computers, servers, printers, and statistical databases/software will be turned over to DSM at the end of the project, by which time the specialists will have been trained fully in its use and maintenance. In the future, they will have the necessary skills and knowledge to maintain the equipment and ensure its performance. The plan calls for laboratories accredited in accordance with international standards within the next two years. With the achievement of accreditation, the international accreditation organization will be engaged to perform regular audits to ensure compliance with requirements. This will require that DSM complies and continues to comply to retain their international accreditation. By becoming a member of, and actively participating in, international standards, metrology and accreditation organizations, DSM will enhance its knowledge and understanding of these technical activities. This knowledge will be extremely important and useful for the country to comply with WTO and ASEAN commitments and beyond.

#### ***Component B: Supporting the Enhancement of Industrial Statistics***

In relation to component B, the target staff members of the DoIH are expected at the end of the project to be well trained in updating relevant data and performing empirical analysis to serve policy making purposes. The maintenance cost of the statistical database is expected to be low and supported through the regular Government budget. All researchers, analysts, observers, policy makers, development planners, potential investors, business persons dealing with industrial development in Lao PDR would benefit from the project. In particular, manufacturers would benefit greatly from consistent Government industrial policies relating to growth, productivity and sustainability, and from reliable statistical information for industrial and market structures of Lao PDR, the region and the world.

## SECTION IV: RISK AND MITIGATION STRATEGY

### *IV.1 Risks*

#### *Component A: Strengthening the National Quality Infrastructure in Lao PDR*

Over the past few years, the Government has demonstrated strong commitment to regional and international integration, and has begun to pay special attention to building the competitiveness of local enterprises in regional and international markets.

Major risks within component A include

- The inability of the public sector to meet fast-changing private sector needs in quality and standards;
- The costs to sustain equipment maintenance and operations surmount the revenues from fees and charges. Consequently, the laboratory would require the permanent support through Government budget; and
- DSM is not able to provide the services demanded by the private sector at a competitive price and therefore, either a subsidy by the Government is necessary or the private sector continues to obtain the tests abroad and hence demand remains low.

#### *Component B: Supporting the Enhancement of Industrial Statistics*

The Government is committed on the highest levels to improve the availability and quality of statistics, including industrial statistics. In order for statistical information to be useful to policy makers and the broader public, data must be accurate, timely, and collected in a consistent manner. Updating and maintaining the sampling frame is therefore of critical importance.

Major risks within component B include

- The inability to ensure effective maintenance and timely updating of the database system, and related to that the challenges associated with the
  - Incomplete business register and (present) sampling frame;
  - Limited availability of relevant administrative records;
  - High informality of the private sector; and
  - Low response rates of the private sector to survey tools such as questionnaires;
- The lacking funds required in order to maintain and permanently update the sampling frame. In addition, the responsibility to update the sampling frame lies within the LSB and therefore outside the jurisdiction of the MoIC; and
- Data and statistical information is not collected accurately, timely, and in a consistent manner.

## IV.2 Mitigation strategy

The EIF has greatly assisted the country to put in place an effective governance structure. The DTIS, that underscores the significance of NQI and evidence-based industrial promotion policy among key stakeholders, ensures awareness of the importance among policy makers and the business community. Both provide regular and critical input into the present Aid for Trade governance structure such as National Integrated Framework Governance Structure, the TPSWG and Program Executive Committee (PEC). All those act as a platform for coordinating support from development partners and are a body for monitoring program impact.

Component A specific risks can be mitigated by involving the private sector in selecting the required tests and quality standard tools necessary in order for them to comply with international standards. This input helps in assessing the financial resources required to purchase and operate the equipment and estimating the revenues. Based on this revenue-cost model, DSM can decide what services can be offered on a cost-efficient and service-efficient level.

In addition, DSM is the major Governmental organization responsible for ensuring compliance with the WTO-TBT and SPS agreements. Without the services proposed by DSM, Lao PDR will not meet its committed obligations to the WTO and ASEAN. Therefore, in the case the project does not raise sufficient funds to sustain itself, it is likely that the Government would provide basic funding and support for the implementation of the NQI Strategic Plan.

Component B specific risks can be mitigated by building awareness about the importance of high-quality statistical information to make informed policy decisions that will enable the private sector's ability to compete both domestically and internationally. The private sector, in turn, relies on industry-specific data in order to gauge the market and make informed business decisions. In addition, realizing the importance of quality statistics, especially by the Government, will also facilitate the mobilization of the funds necessary for LSB to update the sample frame.

A key role should play the capacity building component at both the headquarters as well as provincial level. This enables DoIH to better maintain and update the database system and using online tools will greatly reduce the maintenance costs. Further, the industrial survey will help building capacity and contribute to better statistical information. The objective of this exercise is to improve data collection methods.

The following Table 4 summarizes the risks identified in the project as well as measures to mitigate each risk.

**Table 4:** *Summary of Risks and Mitigation Strategy*

Risks		Mitigation strategy
<b>Standardization</b>		
Outcome: Adoption and implementation of the WTO TBT Code of Good Practice for Standardization		
- Insufficient capacity to comply with the requirements		- Promote Public Awareness and Benefits of Implementing International Standards. - The WTO-TBT Enquiry Point Office formally established
- Lack of skilled technical /human		Strengthen Capacity in Standardization -

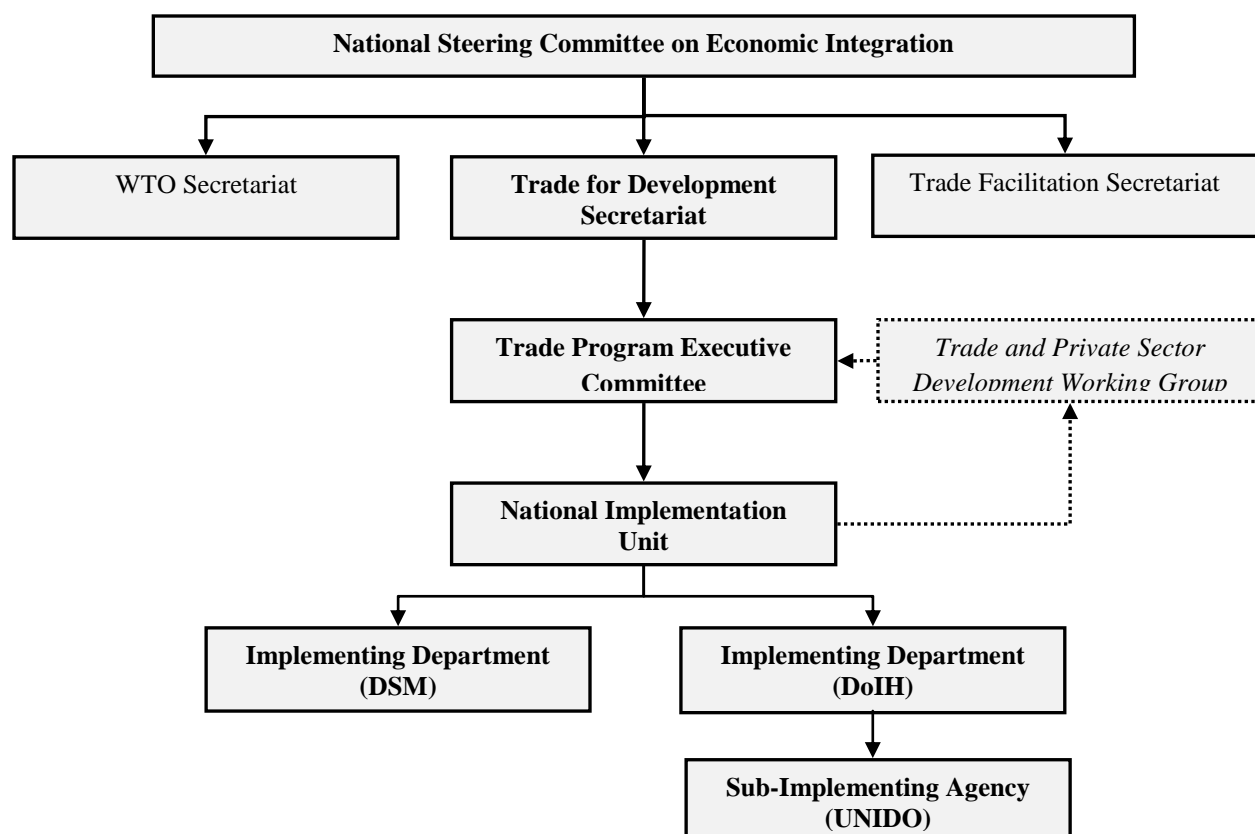
resources		Development of the activities of the Standards Division of DSM to be able to meet the needs of stakeholders for documentary standards
<b>Metrology</b> Outcome: Development of a national metrology system to ensure uniformity of measurement within Lao PDR and traceability of measurements to the international system of units, to improve quality of products and services and to support international trade		
- DSM's future and mission can only be accomplished by legislative and financial support from the Government and the international donor community		The present Metrology Law requires revision to include be in compliance with ASEAN and international requirements. Bring Current Metrology Related Legislation into Compliance with International Standards and best Practice
- Upgrading measurement standards to meet industry needs will depend on full installation of required equipment and training.		- Allocate sufficient funding for purchasing equipment. - Provide training and hands on knowledge in the operation of a national metrology system
<b>Accreditation</b> Outcome: (i) Develop DSM capacity – particularly at its National Accreditation Bureau – in provision of reliable, credible voluntary accreditation services for a fee that meets industry needs and that is in compliance with international standards and guidelines; (ii) Develop a roadmap to achieve national and international recognition and accreditation		
- This is a long-term process and will require the assistance of an international technical expert to provide ongoing guidance as LNAB follows the road map to achieve this objective		- Short term International expert specialized in forming and implementing an accreditation organization and accreditation expert needed to assist in the development of the LNAB quality/procedural manual. - Candidates for accreditation assessors will be solicited and selected from qualified technical specialist from stakeholder Ministries, academia and the private sector; selected candidates will be trained in accordance with ILAC requirements
<b>Quality Center</b> Outcome: Ensure full operation of the National Quality Center and Science-based Quality Control Laboratory in Champasack province		
- The number of quality tests conducted will depend on the trust the Quality Center gains with the private sector, and the price/quality the private sector obtains.		- Approach the international certification body to certify the inspectors of the quality center in order to build trust of the private sector on the service of the center thus stimulated enquiries.
- Low awareness of the private sector of the benefits of quality systems - Lack of understanding of the regional and international quality and safety requirements of other countries		- Promote Public Awareness and Benefits of Implementing quality management system.
<b>Supporting the Enhancement of the Industrial Statistics</b> Outcome: Enhance institutional capacity for policy-oriented empirical analysis of the Lao manufacturing sector		
- To ensure effective maintenance and timely updating of the database system		Provide necessary training to key staff of the DoIH and establish good practice in database maintenance

## SECTION V: PROJECT IMPLEMENTATION ARRANGEMENTS

### V.1 *Project institutional and implementation arrangements (description of the implementing entities)*

The National Integrated Framework Governance Structure (NIFGS), as illustrated in Figure 2, is an institutional and implementation framework. Overall policy direction will be provided by the **Trade for Development Secretariat**, operating under the supervision of the National Steering Committee for Economic Integration (NSC) which is chaired by the Deputy Prime Minister/Minister of Foreign Affairs. The **Trade Program Executive Committee (PEC)** is chaired by Vice Minister (VM) of MOIC, Madam Khemmani Pholsena and co-chaired by Mr. Stefan Schleuning, Head of Cooperation of the European Union. In line with the Paris and Vientiane Declarations on Aid Effectiveness, the mandate of the PEC is to provide strategic advice, coordination, and common operating guidelines with regard to the implementation of trade-related programs and projects in Lao PDR. The meeting also approves the work plan and associated budget for trade-related project activities. The PEC meets twice per year.

**Figure 2:** *Diagram of the national institutional framework and implementation arrangement of the Tier-2 project*



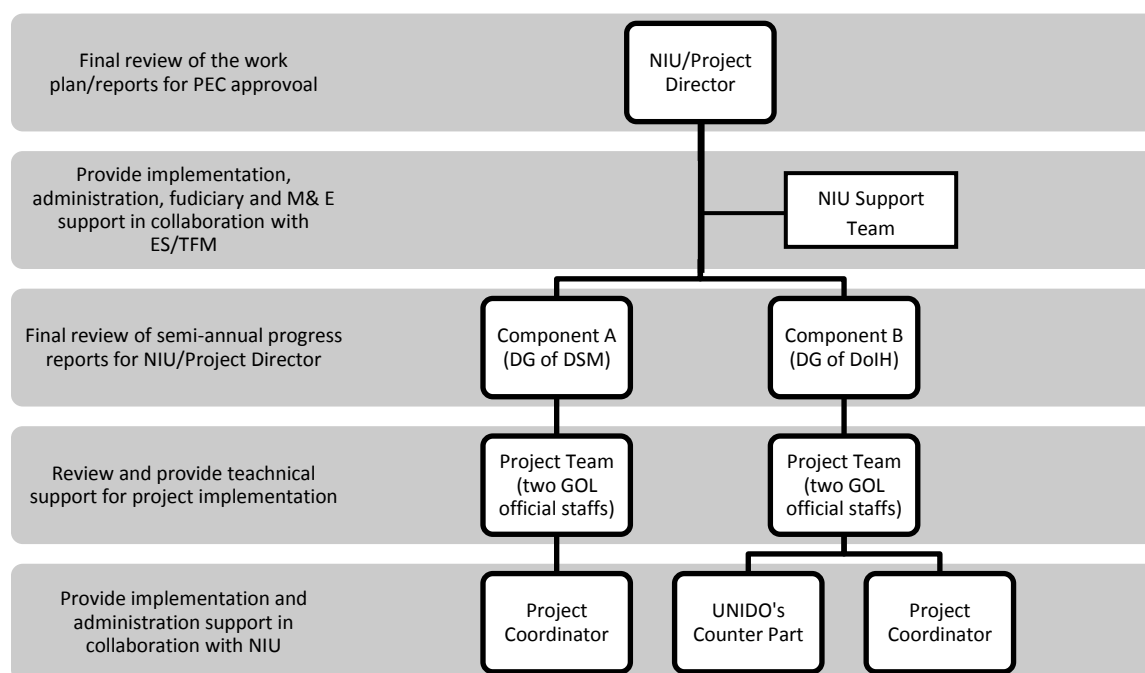


The **National Implementation Unit (NIU)** within the Foreign Aid Division of the MoIC is the secretariat for the PEC, the grant recipient entity, and the core technical and fiduciary implementing unit for the Tier-2 project. It plays a key role in the implementation of the proposed project activities as well as in the communication between the implementing agencies and the EIF. The detailed scope of work of the NIU is presented in item C of this section.

The implementing departments (DSM and DoIH) are directly responsible for the technical implementation of project components and for the day-to-day execution of activities. Each designated implementing department will be responsible for the preparation of work plans, taking the lead on issues related to technical implementation, ensuring the delivery of specific project outputs, and progress reporting to the NIU and the EIF at large.

Work plans are always designed for a twelve months period following the Government's fiscal year (October to September). The work plans are then presented, reviewed and discussed in detail at the bi-annual PEC meetings. In case major adjustments to the work plan need to be made e.g. implementation falls behind the schedule, adjustments to the work plans can be made at the PEC meetings. Implementing departments will also work closely with the NIU and report to the NIU with regard to all financial, administrative and procurement issues. Progress on project implementation will be reported at the PEC, which provides broad supervision on all activities under the TDF and EIF programs, and other trade-related donor-activities. Figure 3 explains the project supervision and reporting lines.

**Figure 3: Supervision chart for Tier-2 Project**



**Implementing agencies** are DSM and DoIH. DSM is a Government body under the MoST. DSM is the country's leading authority in the area of standardization, metrology, accreditation, conformity assessment and related activities, and is tasked with the technical implementation of

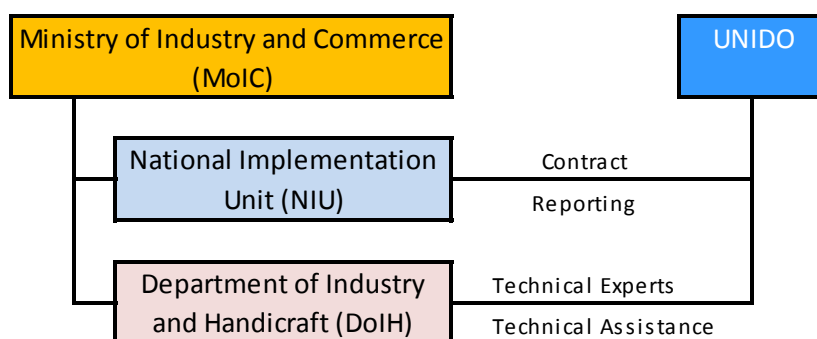
component A. In addition to supporting these highly technical activities, DSM's mission is to provide a host of credible technical services that support Lao innovation and industrial competitiveness by advancing measurement science, standards and technology in ways that will contribute to the economic development of the country, improving the health and safety environment and the standard of living of the Lao people. DSM has more than 40 staff spread over seven technical and administrative/planning divisions. The agency is led by a Director General and his deputy.

DSM has previously participated in the TDF project, under subcomponent B.4: Institutional, legal and regulatory reform and adjustment for TBT. During that engagement, DSM staff has learned how to implement the technical assistance program as well as become familiar with rigorous reporting requirements and related documentation. In this project, DSM will host two national project coordinators, one in DSM (responsible for any coordination in Vientiane) and one in the quality center in Champasak. DSM will also provide regular progress reports to the NIU. The reports will be prepared bi-annually and presented at the bi-annual PEC meetings. In addition to the semi-annual reports, brief progress reports will be provided to the NIU on a quarterly basis to monitor implementation of activities.

DoIH is a Government body under the MoIC and is the main beneficiary of component B (see Figure 3). DoIH is the leading agency for industrial development, promotion policy as well as regulations governing the manufacturing sectors in Lao PDR. As part of the mandate, DoIH contributes to the NSS by supplying industry statistics to the LSB. The LSB is responsible for the NSS and coordinates the production of comprehensive, high-quality, timely, transparent and credible economic, social and environment statistics. It also ensures both comparability of national and international statistics as well as the quality of the data. Since this project strengthens the data provided by the DoIH to the LSB, this project contributes to a better NSS. LSB is therefore an indirect beneficiary.

Due to the high expertise of **UNIDO** in enhancing institutional capacity for policy-oriented empirical analysis on country's manufacturing sector and data-user services, the implementation of the activities under component B will be executed by UNIDO in close cooperation with DoIH. As for the implementation arrangement, UNIDO will be contracted by the NIU at the MoIC directly. The exact implementation arrangement details still have to be finally negotiated (see Figure 4).

**Figure 4: Implementation Arrangement for Component B:**



Over the past decade, DoIH has been working closely with UNIDO. The past experience of DoIH working with UNIDO did not only raise the capacity within DoIH to handle international projects but the good relationship between the two counterparts will be a key factor contributing to the success of this component. To ensure ownership, experts provided by UNIDO will be placed in DoIH. In addition, a national coordinator to handle project reporting requirements, coordination with other stakeholders, and other tasks will be placed in DoIH.

To facilitate coordination and communication between UNIDO, DoIH and the NIU, UNIDO will recruit a project coordinator for component B (DoIH will be involved in the recruitment process). The actual placement of the coordinator will be in DoIH with reporting responsibilities directly to the Department. Similarly to component A, UNIDO as the executing agency must supply the required reports to NIU. In addition to the semi-annual reports, brief progress reports will be provided to the NIU on a quarterly basis to monitor implementation of activities. All activities are overseen by the PEC where the work plan and associated budget are approved.

## ***V.2 National Ownership***

### ***National Implementation Unit (NIU)***

Both project components will be implemented through the national system under the guidance of the PEC operated under the TPSWG and in line with the Paris and Vientiane Declarations on Aid Effectiveness. Both the TPSWG and PEC enjoy high ownership in the country to coordinate trade-related technical assistance and promote Government-Donor dialogue.

The NIU at the MoIC is the principal coordinating entity for trade-related assistance. Coordination is not only limited to project activities but also includes coordination and cooperation with implementing entities and Development Partners such as the EIF Executive Secretariat in Geneva. It further ensures that all (including EIF-funded) trade-related technical assistance projects meet the country's needs and complies with financial, fiduciary, procurement, and for EIF projects with EIF requirements. In this regard, the NIU provides guidance and assistance to implementing agencies in formulating project proposals.

### ***Department of Standardization and Metrology (DSM)***

Until recently, there was no policy document for guidance on TBT capacity building. Since Lao PDR had very limited capacity in TBT, a "Capacity Assessment and Action Plan in TBT" was produced and finalized in July 2011. While this assessment provides a useful basis to assess capacity building needs, it was insufficient to use it as a comprehensive TBT action plan for the next five to ten years. Therefore, a strategic TBT action plan has been developed to strengthen the national quality infrastructure.

This project component is designed to support the implementation of the first National Strategic Plan for Quality Infrastructure, consisting of:

- (i) Technical assistance to building the national standardization system;
- (ii) Developing a national metrology system to ensure the uniformity and traceability of measurements;

- (iii) Technical infrastructure for accreditation;
- (iv) Achieving mutual recognition of accreditation and certification results; and
- (v) Creating private sector awareness of the importance and benefits of implementing international quality standards.

Metrology, standards and conformity assessment are three separate but interdependent and interlinked “pillars” of knowledge, which are essential for Lao PDR to develop NQI capabilities that enable sustainable development leading to full participation in international trade, and to satisfy the technical requirements of the multilateral trading system. These activities provide a vital link to global trade, market access and export competitiveness, as they contribute to consumer confidence in product safety, quality, health and the environment.

DSM, as the technical implementing agency, has shown high ownership in the project as it was heavily involved in drafting this project proposal and facilitated the dialogue with international TBT experts to ensure successful implementation.

#### Department of Industry and Handicraft

The national ownership for Component B evidently shows in the development of this proposal on the enhancement of statistical and analytical capacities. This Tier-2 proposal was developed by a team of national consultants together with technical staffs at the DoIH, based on an original proposal from UNIDO technical team and key staff of the DoIH and LSB. The original proposal requested for technical cooperation from UNIDO in establishing an integrated computerized system of the central database within the ministry.

At the first few months of project implementation, DoIH and NIU will draft and negotiate the contract with UNIDO. It is the DoIH desire that experts and project coordinator provided by UNIDO be placed in the department. More importantly, DoIH also assigned two staffs as Tier-2 project focal points.

#### Government Contribution

The Government of Lao PDR will provide in-kind contributions to this project by assigning Government officials to carry out specific functions. The Government is already committed through the support from

- High level staff such as the Vice Minister of Industry and Commerce;
- Mid-level staff such as the DG of DSM, MoST; DG of the DPC and DoIH, MoIC; and
- Technical level officers in each department.

The technical officers, in collaboration with the technical experts, will actively participate in project implementation on a daily basis while high and mid-level staff will provide periodic supervision.

The Government is also stepping up its contribution, particularly to the NIU, indicating its strong commitment to the EIF and the trade program at large. Over the past years, the Government has

permanently increased Government staff and is continuing to do so. For example, in April 2013 two new Government staff joined the NIU.

Furthermore, to support project implementation, the Government will arrange a suitably equipped office space, office supplies, common facilities, local transportation for official business, and ensure access to office equipment.

The in-kind contribution is summarized and costed in the following Table 5:

**Table 5: Costed in-kind Contribution by the Government of Lao PDR**

	<b>Component A</b>	<b>Component B</b>	<b>Project Implementation Support</b>	<b>Total</b>
<b><i>Technical officers</i></b>	<b><u>USD 506,880</u></b>	<b><u>USD 126,720</u></b>	<b><u>USD 64,800</u></b>	<b><u>USD 698,400</u></b>
Number of officers	20	5	5	
Unit Cost*	1,408	1,408	1,440	
Number of Months**	18	18	9	
<b><i>Facility***</i></b>	<b><u>USD 18,000</u></b>	<b><u>USD 9,000</u></b>	<b><u>USD 1,800</u></b>	<b><u>USD 28,800</u></b>
Common Facility fee	500	250	50	
Number of Months	36	36	36	
<b><i>Office Space***</i></b>	<b><u>USD 108,000</u></b>	<b><u>USD 36,000</u></b>	<b><u>0</u></b>	<b><u>USD 144,000</u></b>
Rental	3,000	1,000	-	
Number of Months	36	36	36	
<b><i>Grand Total</i></b>	<b><u>632,880</u></b>	<b><u>171,720</u></b>	<b><u>66,600</u></b>	<b><u>871,200</u></b>

\* Average monthly salary. The average monthly salary is based on an hourly wage of \$8 and 8 working hours/day (average 22 working days/month).

\*\* It is expected that Government staff input for components A (DSM) and B (DoIH) will be roughly 50%, and at the NIU roughly 25%

\*\*\* Valuations for the facilities and office space are based on current market price estimations

### ***V.3 NIU Implementation Arrangement***

As the main grant recipient entity and the core technical and fiduciary implementing unit for the Tier-2 project the NIU assumes several responsibilities in relation to this project, i.e.

- Coordinate the implementing departments at the technical level,
- Manage the work planning process,
- Coordinate progress and financial reporting at the project level,
- Provide financial management, and
- Provide procurement services to implementing agencies.

As part of technical support, NIU will assist implementing departments with the preparation of respective work plans in order to facilitate the approval process as well as monitor the implementation of those work plans. It will also consolidate and review the progress reports from implementing departments quarterly and bi-annually. In addition, NIU will continue to support ES/TFM missions as has been done for Tier 1 project. To effectively and seamlessly implement the proposed work program, the recruitment of four project coordinators is necessary. The project coordinators will be embedded in each of the implementing departments (DSM and DoIH), the quality center in Champasak, as well as the NIU.

It is expected that all project coordinators enhance compliance with the rigorous project administrative requirements and assist in dealing with increased EIF reporting requirements. In addition, the project coordinators will function as antennas to facilitate dialogue between the concerned agencies. In this regard they will be able to flag upcoming issues and complications can be resolved before they arise to problems.

To better perform the increasing fiduciary tasks, the inputs of one part-time International Financial Specialist and one International Procurement Specialist is requested. Both specialists will be placed at the NIU office.

At present, the NIU is staffed with one procurement officer (full time), one procurement assistant (full time), as well as one part-time international procurement specialist (seven days per month). Taking into account the additional workload for procurement services, an additional three days per month of the international procurement specialist is required for the NIU. The role of this international specialist is to guide the national procurement officer and assistant in carrying out their tasks and ensure compliance with World Bank procurement procedures. This is particularly necessary for highly technical and complex tasks that require still close supervision by an international expert.

The international financial specialist will assist the NIU with carrying out all fiduciary functions necessary, including audit, financial reporting, and other tasks. The expert will help in capacity building of relevant NIU staff and thereby strengthen the NIU fiduciary system. The assistance of the international expert will be required on average 1.5 months per year (33 working days).

## SECTION VI: LOGICAL FRAMEWORK

Narrative	Key Performance Indicators	Means of Verification	Assumptions And Risks
<p>Goal:</p> <ul style="list-style-type: none"> <li>➤ To increase quality, safety and reliability of Lao products and services, and improve competitiveness</li> </ul>	<p>Indicators:</p> <ol style="list-style-type: none"> <li>1. increase in investment in manufacturing and service sectors by 20% by 2018</li> <li>2. Increase in manufacturing and service exports by 20% by 2018</li> </ol>	National Statistics	<ul style="list-style-type: none"> <li>- Low awareness of the private sector of the benefits of quality standard systems.</li> <li>- Lack of understanding of the regional and international quality and safety requirements of other countries.</li> <li>- Need for more investments in processing, packaging, labeling as well as human resource by the private sector.</li> </ul>
<p>Objectives:</p> <ul style="list-style-type: none"> <li>➤ Strengthen the national quality infrastructure and support the enhancement of industrial statistics</li> </ul>	<p>Indicators:</p> <ol style="list-style-type: none"> <li>1. 10 firms assisted by DSM and relevant quality related public institutions;</li> <li>2. Growth in outputs of 5 key manufacturing sector and service sectors by 30% by 2018</li> </ol>		
Component A: Strengthen the National Quality Infrastructure in Lao PDR			
Subcomponent A.1: Standardization			
<p>Objective/Outcome:</p> <ul style="list-style-type: none"> <li>➤ Adoption and implementation of the WTO TBT Code of Good Practice for Standardization</li> </ul>	<p>Indicators:</p> <ul style="list-style-type: none"> <li>• 100 standards adopted/approved</li> </ul>	Progress report	<ul style="list-style-type: none"> <li>- Capacity building to comply with the requirements</li> <li>- Lack of skilled technical /human resources</li> </ul>
<p>Outputs:</p> <ul style="list-style-type: none"> <li>• Strengthened capacity in standardization and development of procedures of standards</li> </ul>	<p>Indicators:</p> <ul style="list-style-type: none"> <li>• 2 procedure for developing national standards and adopting international standards</li> </ul>	Progress report	

Narrative	Key Performance Indicators	Means of Verification	Assumptions And Risks
<ul style="list-style-type: none"> <li>Enhanced public awareness of benefits of implementing international standards through workshops and seminars, and others.</li> </ul>	<p>developed</p> <ul style="list-style-type: none"> <li>9 workshops /seminars /training events organized</li> <li>250 participants in the workshops /seminars /training events</li> <li>9 dissemination material (brochures, newsletters, etc.) produced</li> <li>3 participation in the international standards activities/meeting/conferences</li> </ul>		
Subcomponent A.2: Metrology			
<p>Objective/Outcome:</p> <ul style="list-style-type: none"> <li>Development of a national metrology system to ensure uniformity of measurements with the Lao PDR and traceability of measurements to the international system of units, to improve quality of products and services and to support international trade</li> </ul>	<p>Indicator:</p> <ul style="list-style-type: none"> <li>30 certificates issued</li> </ul>	<p>Certificates issued will be show credible results</p>	<p>DSM's future and mission can only be accomplished by legislative and financial support from the Government of the LAO PDR and the international donor community</p>
<p>Outputs:</p> <ul style="list-style-type: none"> <li>Established system &amp; sets of procedures for improving measurement standards.</li> <li>Enhanced capacity and increased awareness related to the implementation of national metrology system</li> </ul>	<p>Indicators:</p> <ul style="list-style-type: none"> <li>1 quality system manual, procedure developed.</li> <li>Calibration service unit/department created</li> <li>9 workshops /seminars /training events organized</li> <li>250 participants in the workshops /seminars /training events</li> <li>1 international metrology organizations participated</li> </ul>	<p>Progress report</p>	



Narrative	Key Performance Indicators	Means of Verification	Assumptions And Risks
Subcomponent A.3: Accreditation			
<p>Objective/Outcome:</p> <ul style="list-style-type: none"> <li>➤ Development of DSM's capacity, particularly its National Accreditation Bureau in provision of reliable, credible voluntary accreditation services for a fee that meet industry needs and that are in compliance with international standards and guidelines.</li> </ul>	<p>Indicator:</p> <ul style="list-style-type: none"> <li>• LNAB established</li> <li>• Member of ILAC and IAF</li> </ul>	<p>LNAB established and staffed.</p> <p>ILAC and IAF acknowledges and acceptance of LNAB as a full member in their organizations</p>	<p>This is a long-term process and will require the assistance of international technical experts to provide ongoing guidance as LNAB follows the road map to achieve this objective</p>
<p>Outputs:</p> <ul style="list-style-type: none"> <li>• Formally established the Lao National Accreditation Bureau (LNAB) in accordance with ISO/IEC 17011;</li> <li>• Enhanced capacity for accreditation body/authority and increased awareness of the benefits of accreditation and the mandatory requirement for WTO-TBT compliance;</li> </ul>	<p>Indicators:</p> <ul style="list-style-type: none"> <li>• 100 of ISO/IEC accreditation standards and guides obtained</li> <li>• 9 workshops /seminars /training events organized</li> <li>• 250 participants in the workshops /seminars /training events</li> <li>• 2 applications for a membership in the international accreditation bodies submitted.</li> </ul>	<p>Progress report</p>	
Subcomponent A.4: Quality Center			
<p>Objective/Outcome:</p> <ul style="list-style-type: none"> <li>➤ Full operations of the National Quality Center and Science-based Quality Control Laboratory in Champasack province</li> </ul>	<p>Indicator:</p> <ul style="list-style-type: none"> <li>• Quality center established</li> </ul>	<p>Progress report</p>	
<p>Outputs:</p> <ul style="list-style-type: none"> <li>• Established national quality system</li> <li>• Strengthened capacity of the quality center and increased awareness of international and national quality standards</li> </ul>	<p>Indicators:</p> <ul style="list-style-type: none"> <li>• National quality needs assessment survey conducted</li> <li>• Operational plan for the quality center developed.</li> <li>• National quality award</li> </ul>	<p>Progress report</p>	

Narrative	Key Performance Indicators	Means of Verification	Assumptions And Risks
	<p>system developed</p> <ul style="list-style-type: none"> <li>Library of ISO quality standards and publication developed.</li> <li>9 workshops / conferences/trainings events organized</li> <li>250 participants in workshops/ conferences/trainings organized.</li> </ul>		
Component B: Supporting the Enhancement of the Industrial Statistics			
<p>Objective/Outcome:</p> <ul style="list-style-type: none"> <li>➤ Enhanced institutional capacity for policy-oriented empirical analysis on the country's manufacturing sector</li> </ul>	<p>Indicator:</p> <ul style="list-style-type: none"> <li>Integrated computerized system of the central database within the Ministry of Industry and Commerce created</li> </ul>	<p>Progress report</p>	
<p>Outputs:</p> <ul style="list-style-type: none"> <li>Developed statistical information database system;</li> <li>Enhanced capacity on industrial survey, statistical indicators &amp; analysis and others related to the operation of the system.</li> </ul>	<p>Indicators:</p> <ul style="list-style-type: none"> <li>12 staff trained</li> <li>Database system developed</li> <li>6 workshops / conferences/trainings events organized</li> <li>120 participants in workshops/ conferences/trainings organized.</li> <li>Prototype software system developed</li> <li>Methodological framework developed.</li> <li>List of the statistical indicators developed</li> </ul>	<p>Progress report</p>	

## SECTION VII: PROJECT ACCOUNTABILITY ARRANGEMENTS

### *VII.1 Legal status of implementing entities*

DSM is part of the MoST.

DoIH is a Government body under the MoIC. The NIU is part of the Foreign Aid Division in the DPC and belongs to the MoIC.

The LSB is a Government body attached to MPI.

### *VII.2 Fiduciary responsibility*

The NIU will be responsible for fiduciary management such as (a) procurement of goods, (b) procurement of services, and (c) financial management.

#### *VII.2.1 Procurement of Goods*

Procurement of goods will be conducted in accordance with

- 1) National Competitive Bidding procedures of the World Bank Procurement Guidelines (May 2004);
- 2) Public bidding procedures specified in the Decree of Government Procurement of Goods, Works, Maintenance and Services dated 9 January 2004; and
- 3) Implementing Rules and Regulations (IRR), Ministry Of Finance No. 0063/MOF, 12 March 2004.

The latter two, 2) and 3), will be taken into account to the extent that the Decree and IRR are consistent with the World Bank Procurement Guidelines.

No	Procurement Method		Procurement Method Threshold
1.	ICB (Goods)	International Competitive Bidding	>USD 100,000
2.	NCB (Goods)	National Competitive Bidding	<USD 100,000
3.	Shopping (Goods)	Compare Quotations	<USD 30,000
4.	Direct Contracting (Goods)	Limited supplier or only 01 supplier	-

#### *VII.2.2 Procurement of Services*

Selection Guidelines will be based on World Bank guideline for the Selection and Employment of Consultants under IBRD Loan and IDA credits & Grants by World Bank Borrower.

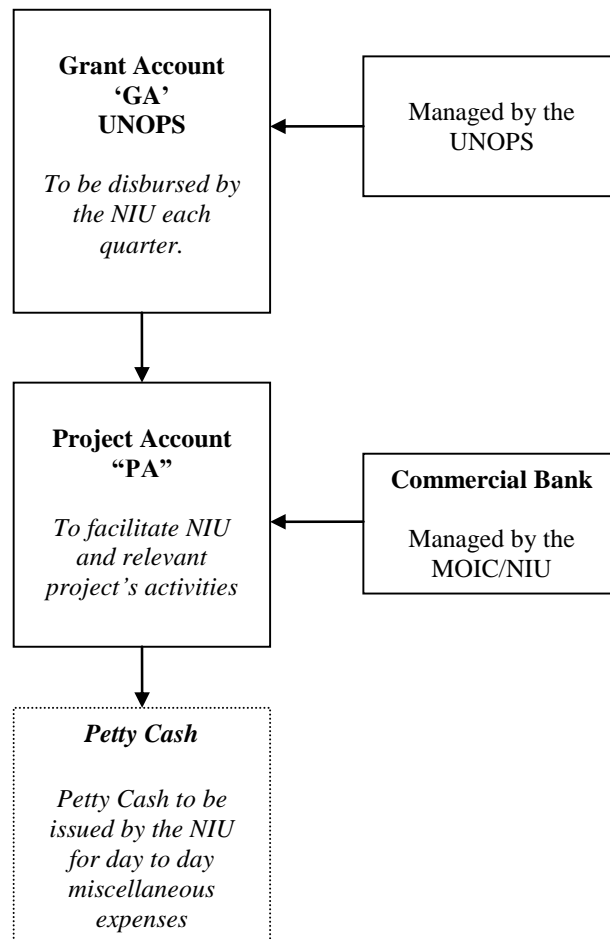
No	Selection Method		Procurement Method Threshold	Prior Review Threshold
1	QCBS (Firms)	Quality- and Cost-Based Selection	>USD 50,000	>USD 100,000
2	QBS (Firms)	Quality Based Selection	>USD 50,000	>USD 100,000
3	CQS (Firms)	Selection based on Consultants' Qualification	<USD 50,000	First Contract
4	SSS (Firms/IC)	Single Source Selection	-	All
5	LCS (Firms)	Least Cost Selection	-	>USD 50,000
6	IC	Individual Consultants	-	>USD 50,000

Procurement of services will follow a procurement plan. For component A, a procurement plan will be developed within the first three months of the project by the NIU. The NIU will rely for this on the aide of an international procurement specialist. For component B, the most critical task for the NIU procurement team will be to conclude the contract with UNIDO in order to timely start the activities. Since the NIU will be the signing party for the UNIDO contract the international procurement specialist will assist in completing this task.

### ***VII.3 Financial management***

Fund flow arrangement for EIF Tier 2 will be arranged according to Government procedures and applicable donor procedures in order to facilitate project activities. The diagram below shows the fund flow from the Grant Account to be managed by UNOPS to the project account to be managed by the NIU as the implementing entity for EIF Tier 2. An overview provides Figure 5.

**Figure 5: Diagram of the Fund Flow**



#### **VII.4 Accounting standards and policies**

- *Applicable Accounting Standards*

Accounting standards and policies for EIF Tier 2 will be aligned with other projects managed under the NIU, such as the TDF project and EIF Tier 1. NIU has adopted the cash basis of accounting (“Cash Accounting”) in accordance with the Government of Lao PDR and World Bank guidelines. Cash Accounting is appropriate for projects implemented by non-revenue earning entities. The project account is prepared on historical cost convention on double-entry accounting system.

- *Accounting Software*

NIU has been using *QuickBooks* accounting software for all active projects. The accounting system is based on a Cash Accounting method whereby revenues and expenses are recorded when cash is received or paid out.

Financial statements are prepared under the historical cost basis double entry accounting. No depreciation will be charged for fixed assets as these items are expensed in full during the month of purchase, and at the end of the project life all assets will be transferred to the Government of Lao PDR in line with the Government's asset management policy.

The reports are presented in US Dollars, in accordance with the requirements of the project.

- *Foreign Exchange Policy*

The project has adopted the Foreign Exchange Policy that is in line with the policy of the Lao Ministry of Finance.

- *Accounting Reporting Period*

The Government financial/accounting year covers 12 months from 1 October through to 30 September.

The Finance Report will follow the ATLAS Based template provided by UNOPS.

- The Report will be submitted to UNOPS and MoIC quarterly, 30 days after the end of each quarter (December, March, June, and September).
- Bank reconciliation will be completed at each month's end.

- *Audit requirements*

The project financial statements and accounts will be audited annually by independent auditor/s acceptable to NIU and UNOPS. The Finance Unit of the NIU will be responsible for maintaining an accurate accounting record that complies with International Accounting Standards.

External audit will be conducted by an independent and qualified audit firm in Lao PDR.

The Audit Report and accompanying audited financial statements should be ready and surrendered to UNOPS and relevant stakeholders no later than 6 (six) months after the end of the fiscal year or period which the audit covers. As the Lao PDR fiscal year ends on September 30, the audit reports are due to be submitted by March 31 of each year.

The scope of the audit shall be discussed and approved by UNOPS or relevant stakeholders before the selection of the auditor is made. The recruitment of Auditor will be conducted based on an appropriate procurement method to be determined by NIU.

## ***VII.5 Monitoring and Evaluation (M&E)***

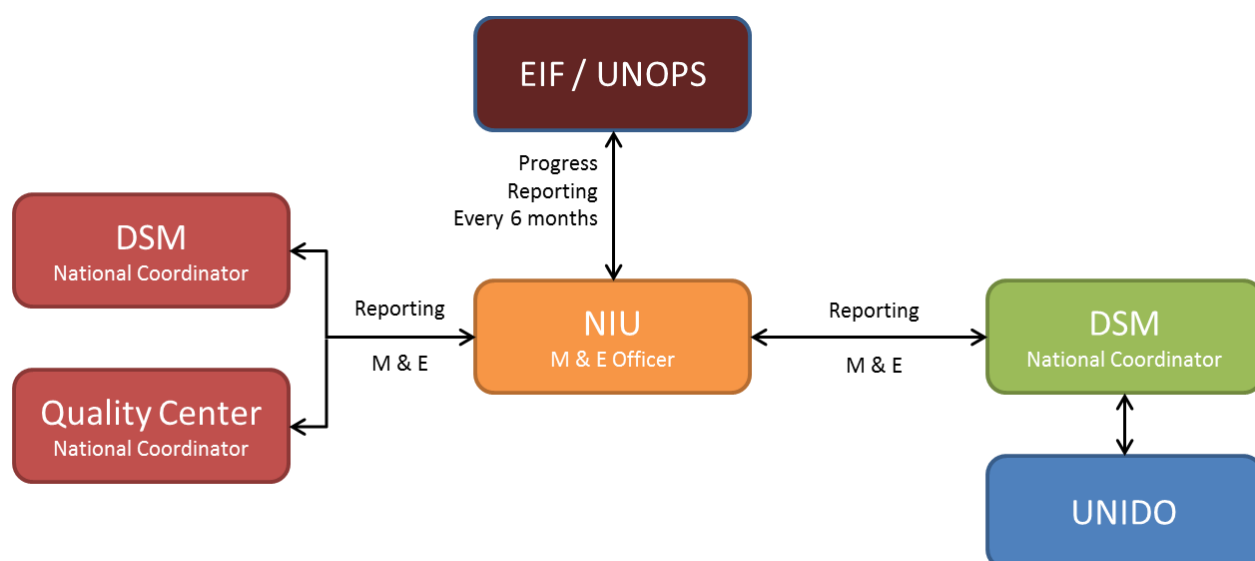
DSM and the DoIH are directly responsible for the technical implementation of project components, and for day-to-day execution of activities as stated in the work plan. DSM and DoIH will be responsible for ensuring the delivery of specific project outputs and progress reporting to the PEC.

The NIU will lead project program monitoring and evaluation (M&E) to maximize development impact through developing and implementing M&E systems and relevant project implementation

manuals. The results will be monitored by the NIU and reported upon as part of six-monthly progress reports. This is also in line with the 6-months cycle of the reporting to the PEC.

The specific M&E tasks are carried out by the M&E officer of the NIU. In order to carry out these tasks, the M&E officers will work closely with the implementing agencies, DSM and DoIH. The coordination officers of both components (placed in DSM, the Quality Center, and DoIH) will provide the necessary information to track the project performance or facilitate the contact with relevant staff members. If necessary, the M&E officer at NIU will provide guidance on how to monitor and evaluate the project performance. Financing for the M&E officer comes from the TDF-2 and will be therefore budget-neutral to this EIF Tier-2 project.

*Figure 6: Coordination Structure for Results Monitoring and Evaluation*



The NIU will also be responsible for implementing mid-term and end-term evaluations to assess the performance of the program. DSM and DoIH will assist the NIU in carrying out these assignments. In addition, the implementing agencies will work closely with the NIU to report on all financial, administrative and procurement issues (to the NIU).

The results framework is detailed in Annex 4. This is based on the DTIS 2012 Updated Trade and Private Sector Development Roadmap. The results will be monitored by DSM and DoIH .

## **Annexes**



# **ANNEX I: TERMS OF REFERENCES FOR KEY STAFFS AND OTHER' TASK OUTLINES**

## **1. Short Term Technical Assistance – Accreditation**

**Position:** – Technical specialist in International Accreditation of Laboratories, Certification and Inspection bodies.

**Location:** Lao PDR

The International Accreditation Advisor's duties and responsibilities include, but are not limited to, the following:

The short-term accreditation technical specialist will assist in establishing the National Laboratory Accreditation Bureau within in the Department of Standardization and Metrology (DSM).

The accreditation technical specialist must be familiar with the international standard ISO/IEC 17011 – “Conformity Assessment – General requirements for accreditation bodies accrediting conformity assessment bodies” as well related accreditation standards and procedures established by ILAC and IAF.

### **Deliverables:**

- Develop and conduct an internal workshop on the implementation of ISO/IEC 17011 for the staff of NLAB
- Develop a Procedure Manual for the operation of the Lao National Accreditation Bureau
- Develop and conduct an internal workshop – “Introduction to International accreditation of accreditation of Laboratories, certification and inspection bodies”
- Prior to the end of the assessment, the technical specialist is required to submit a written report detailing the activities conducted during the assignment

**Term of Assignment** – 30 days

### **Key Qualifications**

- Minimum of 5 years of work experience in the field of accreditation, work experience in a recognized accreditation body that participated in the in either a regional or international Mutual Recognition Arrangement desirable
- Minimum of a Bachelor Degree in engineering, physics chemistry or relevant discipline
- Good interpersonal skills and effective communication
- Excellent in English report writing and communication skills
- All activities will be conducted in English –knowledge of the Lao language an advantage

## **2. Short Term Technical Assistance – Quality Management Systems Specialist**

**Position** – Technical specialist in International Quality Management Systems

**Location:** Lao PDR

**Deliverables:**

- Develop and conduct an internal DSM workshop on international quality concepts
- Develop a train-the-trainer program for DSM staff, enabling them to conduct QMS workshops throughout the country – this should include providing a power point presentation that the DSM staff will use when they conduct QMS seminars and workshops
- Develop a conduct a series of workshops in Laos “Introduction to ISO 9001”
- Produce a needs-assessment survey questionnaire that will be implemented/conducted by DSM
- Make recommendations and outline the procedure for selected DSM staff to achieve international certification as ISO 9001 internal auditors
- Prior to the end of the assessment, the technical specialist is required to submit a written report detailing the activities conducted during the assignment

**Term of Assignment** – 45 days

**Key Qualifications**

- Minimum of 10 years of work experience in the field of Quality Management Systems, work experience in an ISO 9001 certified organization desirable
- Having QM auditor certification
- Minimum of a Bachelor Degree in engineering, physics, chemistry or relevant discipline
- Good interpersonal skills and effective communication
- Excellent in English report writing and communication skills
- All activities will be conducted in English –knowledge of the Lao language an advantage

### **3. Trade Analyst**

#### **Scope of work**

The Trade Analyst's duties and responsibilities include, but are not limited to, the following:

- Assist with the day-to-day management and coordination of projects under the National Integrated Framework Governance Structure (NIFGS)
- Coordinate with Implementing Agencies and focal points based in various ministries
- Prepare in conjunction with relevant stakeholders project write up, budgets, work plan terms of references, and reports
- Work closely with the trade advisor and trade analyst
- Assist the NIU in overall implementation of TDF, EIF Tier 2 project and other trade-related projects under the responsibility of the NIU
- Prepare minutes of meeting/SCs/etc.
- Provide technical inputs as required
- Provide support to the international and national staff members
- Liaise with relevant donors on issue related to the project or the NIU
- Prepare reports as required
- Perform other tasks as requested by the department

#### **Duration of assignment**

The indicative estimate input for this consulting assignment is 18 person-months on a full time basis. The contract may be signed on a year-by-year basis or as agreed by the NIU and the selected consultant.

#### **Key qualifications**

- Minimum bachelor degree in international trade, development economics or related field
- Minimum of 2 years of relevant experience with proven project management skills
- Prior work experience with international agencies or technical assistance projects based in the government will be an asset
- Excellent communication skills, including speaking and writing in both English and Lao languages
- Good interpersonal skills and result orientation
- Excellent analytical and presentation skills
- Computer literate (Microsoft Office package)

#### **4. Short-term IT Consultant**

##### **Scope of work:**

The IT Consultant's duties and responsibilities include, but are not limited to, the following:

- Design and maintain the DSM/MoST website including its structure in both Lao and English languages
- Ensure quality control of the materials/documents to be posted on the website
- Liaise closely with the NIU Public Relation Officer in order to get all required information to be uploaded on the website

##### **Duration of assignment:**

The indicative estimated inputs for this assignment are 12 person-months on a full time basis, with the possibility for extension for additional 2 years, based on performance and the availability of project funding.

##### **Key Qualification:**

- University degree in Information Technology, Information Science, Information Management System or related field
- Minimum of three years of progressively responsible experience in designing website and manage the information system
- Excellent verbal and written communication in Lao and English languages
- Be able to work under time pressure and with close deadlines on any given assignment
- Flexible and consistent
- Creative and be able to work with the required attention to detail

## **5. Full Time National Project Coordinators**

### **Scope of work:**

- Assists the Implementing Agency to assume operational management of the project in accordance with the project document and both UNOPS/NIU policies and procedures
- In cooperation with the Implementing Agency and with technical inputs from the Executing Agency/Agencies, prepares, monitors, reviews and updates project work plans and budgets (annual and quarterly)
- Together with the Implementing Agencies, prepares terms of reference for consultants (national and international) and for the various project activities as requested by the Executing Agency/Agencies
- Jointly with the Implementing Agency, prepares background notes and synthesis reports, based on the conclusions and recommendations of international and national consultants
- Together with the Implementing Agency, prepares various project status reports for coordination meetings, for periodic reviews, for annual reviews and for the term evaluations
- Assists the Implementing Agency to organize the review/evaluation missions
- Administers the mobilization of project inputs under the responsibility of the national counterpart agency/agencies
- With respect to international/national consultants or institutions under contract to the project, assists to ensure that these consultants/institutions deliver the inputs in accordance with their contract/terms of reference
- Under the supervision of the Implementing Agency, manage the project budget related to local inputs and expenses. Additionally, ensure that:
  - Accounting records and supporting documents are well kept
  - Financial operations are transparent and UNOPS and NIU financial procedures are applied
- Reports regularly to and keeps the Implementing Agency up-to-date on project progress and flags problems
- Other assigned duties as required by the Implementing Agency or Executing Agency/Agencies.

### **Duration of Assignment**

The indicative estimated inputs for this assignment are 12 person-months on a full time basis, with the possibility for extension for additional 2 years, based on performance and the availability of project funding.

### **Qualifications and selection criteria**

- Minimum Bachelor Degrees in Economics, Business Administration or related field
- Minimum 3 years of working experience with Lao national development projects funded by international donors
- At least 2 years experience in a similar assignment
- Familiar with project implementation
- Strong understanding of the government policy with respect to trade promotion
- Technical knowledge and experience related to the enhanced integrated framework process and trade a distinct advantage
- Authority and seniority that is appropriate to the project
- English skills (reading, writing and speaking) a must
- Project management skills with a strong focus on attention to detail

## **6. Full time Accounting Clerk**

### **Scope of Work:**

- Assist the National Finance officer in manage cash advance, petty cash accounts and communicate with Executing Agencies regarding petty cash requirements and expense claims
- Data entry of invoices and payment vouchers into the accounting software for accounts payable processing
- Account payable function such as processing, weekly cheque runs and monthly payment of consultants and suppliers
- Assist the team in completing monthly reconciliation of supplier accounts, advances, petty cash and bank reconciliations
- Maintains NIU's account journals, ledgers and trail balance
- Assist the team in preparing withdrawal applications and supporting documents/reports for fund withdrawals
- Liaise with Ministry of Finance and Bank of Lao PDR for payment requests
- Assist the National Finance Officer with the month end report and quarterly report and year end reports
- Liaise with all suppliers in all payments and tax matters
- Provide general office support to the finance unit

Ideally, the clerk will have previous experience within a similar organization. He or she will have a can-do and proactive attitude. He or she should be pro-active, able to communicate with different stakeholders, have strong attention to details and ability to work under pressure.

### **General qualifications required:**

- Minimum a diploma in accounting, finance or business-related area
- Minimum 2 years of working experience in similar area, and have knowledge of accounting and bookkeeping procedures
- Good typing skills in Lao and English languages with high level of accuracy and attention to detail
- Sound Office management, administrative and communication skills
- Intermediate to advanced knowledge of Microsoft Office Package (Excel, Word, PowerPoint). Some experience in using accounting software such as Accpac and QuickBooks would be an added advantage
- Able to work as a team, with close cooperation with GSEUs, NIU team, Ministry of Finance, the World Bank and other parties involved
- Familiar with National Treasury, Ministry of Finance payment procedures will be highly regarded

- Fluent in Lao and English languages (spoken and written)
- Reliable, independent and dynamic worker with high social competence and good team spirit
- Good interpersonal skills and result-orientated
- This position is for a Lao National only



## 7. International consultants for Component B (21 w/m):

- One industrial statistician/economist [5.5 w/m = 6 split missions (3 w/m) + work at home base (2.25 w/m) + 1 mission for training WS (0.25 w/m)]
- One systems analyst [7.5 w/m = 5 split missions (4.0 w/m) + work at home base (3.25 w/m) + 1 mission for training WS (0.25 w/m)]
- One Sampling expert. [3 w/m = 2 split missions (1.5 w/m) + work at home base (1.25 w/m) + 1 mission for training WS (0.25 w/m)]

### National experts (60 w/m):

- Two computer programmers (32 w/m)
- One statistical clerk (6 w/m)

### Work schedule for the UNIDO consultants (w/m):

\* = Follow-up work after a mission.

International consultant							National expert	
Industrial statistician – CTA (5.5)			Systems analyst (7.5)		Sampling expert (3.0)		Programmer (32)	Stat.Clerk (6)
Month	Work at homebase (2.25 )	Field mission (3.25 )	Work at homebase (3.25)	Field mission (4.25 )	Work at homebase (1.25)	Field mission (1.75)	(32)	(6)
1	0.5*	0.5		1.0			1.0	
2			1.0*				1.0	
3							2.0	
4	0.5*	0.5		1.0			2.0	
5			0.5*				2.0	
6	0.25*	0.5		1.0			2.0	1.0
7			0.5*				2.0	1.0
8							2.0	1.0
9	0.25	0.25(WS)	0.25	0.25(WS)	0.25	0.25(WS)	2.0	
10							2.0	
11							2.0	
12	0.25	0.5				0.5	2.0	1.0
13					1.0*		2.0	1.0
14							2.0	1.0
15							2.0	
16	0.25	0.5	0.75	0.5		1.0	2.0	
17							2.0	
18	0.25	0.5	0.25	0.5				

## ANNEX II: WORK PLAN (BY COMPONENT AND SUB-COMPONENT)

Component A: Strengthening National Quality Infrastructure	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	x	x	x	x	x	x*	x	x	x	x	x	x**
<b>1. Sub-component A.1: Standardization</b>		x		x		x*		x		x		x**
<p>Expected Output:</p> <ul style="list-style-type: none"> <li>Promote Public Awareness and Benefits of Implementing International Standards.</li> <li>Strengthen Capacity in Standardization Development of the activities of the Standards Division of DSM to be able to meet the needs of stakeholders for documentary standards.</li> </ul> <p>Indicative activities:</p> <ul style="list-style-type: none"> <li>Establishing procedures for preparation, adoption and application of standards in accordance with the World Trade Organization, Technical Barriers to Trade Agreement.</li> <li>Train the WTO-TBT Enquiry Point staff on the WTO TBT agreement, the obligations of the TBT Enquiry point and its operations.</li> <li>Producing a written procedure for developing national standards and adopting international standards.</li> <li>Participating in the major activities of regional and international standard organizations.</li> <li>Developing procedures for creation of technical committees on standardization and to coordinate activities of such committees.</li> <li>Promoting public awareness and benefits of implementing international standards through workshops and seminars, and others.</li> </ul>												
<b>2. Sub-component A.2: Metrology</b>		x	x	x	x	*						
<p>Expected Output:</p> <ul style="list-style-type: none"> <li>Metrology Center Laboratories to develop a Quality System Manual.</li> <li>Develop and Implement a procedure for the Maintenance and Re-Calibration of Laboratory Instrumentation.</li> <li>Establish Traceability of Measurement for National Reference Standards.</li> <li>Establish a program to upgrade measurement standards.</li> <li>DSM's participation in international metrology organizations.</li> </ul> <p>Indicative activities:</p> <ul style="list-style-type: none"> <li>Developing a quality system manual;</li> <li>Developing and implementing a procedure for the maintenance and re-calibration of laboratory instrumentation.</li> <li>Establishing traceability of measurement for national reference standards.</li> <li>Establishing a program to upgrade measurement standards.</li> </ul>												

<ul style="list-style-type: none"> <li>Supporting DSM's participation in international metrology organizations.</li> </ul>												
<b>3. Sub-component A.3: Accreditation</b>		X	X	X	X	X*						
<p>Expected Output:</p> <ul style="list-style-type: none"> <li>Establish LNAB in accordance with the international standard ISO/IEC 17011.</li> <li>Obtain all ISO/IEC Accreditation standards and guides.</li> <li>Creating Awareness of the Benefits of Accreditation and the mandatory requirement for WTO- TBT compliance.</li> <li>Apply for Membership in the International Accreditation Forum (IAF).</li> <li>Apply for membership in the International Laboratory Accreditation Cooperation (ILAC).</li> <li>LNAB becomes a signature to the ILAC and IAF Mutual Recognition Agreements.</li> <li>Short-Term Alternatives to Achieving Mutual Recognition.</li> </ul> <p>Indicative activities:</p> <ul style="list-style-type: none"> <li>Formally establishing the Lao National Accreditation Bureau (LNAB) in accordance with ISO/IEC 17011.</li> <li>Obtaining all ISO/IEC accreditation standards and guides.</li> <li>Creating awareness of the benefits of accreditation and the mandatory requirement for WTO-TBT compliance.</li> <li>Supporting application for membership in IAF and ILAC and becoming a signature to the ILAC and IAF mutual recognition agreements.</li> <li>Implementing short term alternatives to achieving mutual recognition.</li> <li>Developing and training a core group of qualified accreditation assessors.</li> </ul>												
<b>4. Sub-component A.4: Quality Centre</b>	X	X	X	X	X	X*	X	X	X	X	X	X**
<p>Expected Output:</p> <ul style="list-style-type: none"> <li>The Quality Center becomes operational to carry out their functions</li> </ul> <p>Indicative activities:</p> <ul style="list-style-type: none"> <li>Conducting national quality needs assessment.</li> <li>Developing operational plan and providing necessary human resource development support to the Quality Center and science-based Quality Control Laboratory in Champasack.</li> <li>Developing and implementing national quality award system.</li> <li>Creating library of ISO quality standards and publication.</li> <li>Conducting demand driven trainings and workshops on international and national quality standards.</li> </ul>												
<b>Component B: Strengthening Industrial Statistics</b>	X	X	X	X	X	X*	X	X	X	X	X	X**
<p>Expected Output:</p> <ul style="list-style-type: none"> <li>Capacity building and upgrading of IT specialists and statisticians for industrial development.</li> </ul>												

- Establishment of a central statistical information system (or, central database system) in DoIH, that is equipped with an integrated software system.
- Preparing a comprehensive list of the analytical indicators, relevant for such analysis.
- Updating the sample frame and conducting an industrial survey – learning by doing for analysts and statisticians.
- Follow-up recommendations and an end-of-the-project conference.

Indicative activities:

- On-the-job training, learning by doing, group training, and ad-hoc internal workshops through all project activities.
- Identification of analytical indicators and their data sources and arrangement for regular collection (and in some cases acquisition) of those data.
- Development of concepts and methodologies for data maintenance and analytical-applications for policy recommendation and monitoring the country's industrial development.
- Designing of the database system, development, installation and application of software relevant for such purposes.
- Development of a prototype software system to maintain business register, to edit data reported by individual establishments, to derive data on value-added, and other derived statistics, to tabulate those data on the macro and meso levels and to produce derived indicators for dissemination.
- Methodological development of the framework based on the theories of growth, productivity and of industrial economics together with environmental, social and demographical consideration.
- Construction of a list of the statistical indicators that is attainable and relevant for action-oriented empirical analysis on the country's manufacturing sector, development of software to calculate and tabulate those indicators.
- Preparation and tabulation of those indicators for the country and for selected country groups (e.g., ASEAN) for international comparisons, and others.

\* A mid-term evaluation will be conducted in year 2

\*\* A final evaluation will be conducted at the end of the project (year 3)

# ANNEX III: LETTER OF SUPPORT FROM THE DEPARTMENT OF STANDARDIZATION AND METROLOGY, MINISTRY OF SCIENCE AND TECHNOLOGY



Lao People's Democratic Republic

Peace Independence Democracy Unity Prosperity

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Ministry of Science and Technology  
Department of Standardization and Metrology

Ref: 0399 /MOST-DSM

Vientiane Capital, 01 JUL 2013

To: General Director,  
Department of Cooperation and Planning,  
Ministry of Industry and Commerce

Subject: Implementation Commitment of the 'Strengthening National Quality Infrastructure and Industrial Statistics in the Lao PDR' Project.

Upon the WTO accession of the Lao PDR, DSM is the key responsible Government agency for the implementation of WTO regulations on Technical Barriers to Trade (TBT) and tasked to improve the present national quality infrastructure (NQI). To date, the department faces several challenges concerning both hardware and software in order to efficiently and effectively carrying out this task and complying with basic WTO rules.

Therefore, on behalf of the Department of Standardization and Metrology (DSM), Ministry of Science and Technology (MoST), I would like to express my sincere gratitude to the National Implementation Unit, Department of Cooperation and Planning, MoIC for the assistance in formulating a project proposal to improve Laos' National Quality Infrastructure (Tier-2 project titled: Strengthening National Quality Infrastructure and Industrial Statistics in the Lao PDR).

## Project Overview of Component A: Strengthening National Quality Infrastructure

Starting date	August 2013
End date	July 2016
Duration	3 years
Total Project Cost in USD	2,025,780
Enhanced Integrated Framework funding sought in USD	1,392,900
Government contribution in USD	632,880

The DSM, as the project implementing agency, commits to the following:

### Implementation arrangement:

The DSM takes note of the existing governance structure for trade-related assistance under the Ministry of Industry and Commerce. DSM commits to providing all necessary documents for the

effective participation in the Trade Program Executive Committee (PEC) under the National Steering Committee on Economic Integration, i.e. preparation and presentation of annual/semi-annual work plans, regular progress reports, etc. All documentation will be made available timely to the secretariat of the PEC, the National Implementation Unit.

The DSM will also supervise two national project coordinators, one in Vientiane office and one in the Quality Center in Champasak Province.

**Activities:**

The department was heavily involved throughout the preparation of the proposal. DSM will be responsible for the execution of all Component A activities as set out in the Tier-2 project proposal. This includes the activities under subcomponents A1 – A4 as well as the activities listed under component A Implementation Support.

The NIU commits to provide the necessary support as explained in the proposal as well as claims responsibility for administrative and fiduciary commitments.

We would like to assure you that DSM, as the implementing agency, is ready to take on this urgently needed Tier-2 project. We are looking forward for your positive response.

Director General,



Sisomphet NHOYBOUAKONG

Country: Lao PDR  
 Project Title: EIF Tier-2: Strengthening National Quality Infrastructure and Industrial Statistics in the LAO PDR  
 Starting Date: 09 December 2013  
 Total Project Budget in USD: 3,391,550

#### EIF Funding Sought

Account	Category	Year 1	Year 2	Year 3	Total
71200	International experts	310,050	230,200	248,000	788,250
71300	Supporting Staff	6,000	6,000	6,000	18,000
71400	National experts	167,800	167,800	153,400	489,000
71600	Travel & Missions	57,000	57,000	57,000	171,000
72100	Subcontracts	135,000	-	-	135,000
72200	Equipment	220,000	-	-	220,000
74100	Professional services	85,840	63,490	63,770	213,100
74200	Communication	35,000	35,000	35,000	105,000
74500	Sundries	17,000	17,000	17,000	51,000
75700	Training & Workshops	120,000	120,000	90,000	330,000
<b>Total Funding Sought from EIF</b>		<b>1,153,690</b>	<b>696,490</b>	<b>670,170</b>	<b>2,520,350</b>

#### Government Contribution

Category	Year 1	Year 2	Year 3	Total
Technical Officers	232,800	232,800	232,800	698,400
Facility	9,600	9,600	9,600	28,800
Office Space	48,000	48,000	48,000	144,000
<b>Total Government Contribution</b>	<b>290,400</b>	<b>290,400</b>	<b>290,400</b>	<b>871,200</b>

<b>Total Project Budget (incl. EIF Funding and Government Contribution) in USD</b>	<b>3,391,550</b>
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Country: Lao PDR

Project Title: **EIF Tier 2: Strengthening National Quality Infrastructure and Industrial Statistics in the LAO PDR**

Starting Date: 09 December 2013

Total Project Budget sought from EIF in USD: **2,520,350**

Components	Year 1	Year 2	Year 3	Total
Component A: Strengthening National Quality Infrastructure	712,300	352,000	328,600	1,392,900
Subcomponent A.1: Standardization	110,000	110,000	110,000	330,000
Subcomponent A.2: Metrology	227,000	32,000	32,000	291,000
Subcomponent A.3: Accreditation	99,900	19,400	19,400	138,700
Subcomponent A.4: Quality center	123,600	98,800	89,800	312,200
Component B: Enhancement of the industrial statistics	333,840	221,490	225,770	781,100
Project Implementation Support (both Components)	107,550	123,000	115,800	346,350
<b>Total:</b>	<b>1,153,690</b>	<b>696,490</b>	<b>670,170</b>	<b>2,520,350</b>



Country: Lao PDR  
Project Title: EIF Tier-2: Strengthening National Quality Infrastructure and Industrial Statistics in the LAO PDR  
Starting Date: 09 December 2013  
Total Project Budget sought from GOL in USD: 871,200

Government Contribution

Technical Officers	506,880	126,720	64,800	698,400
Number of officers*	20	5	5	
Unit Cost**	1,408	1,408	1,440	
Number of Months***	18	18	9	
Facility***	18,000	9,000	1,800	28,800
Common Facility fee*****	500	250	50	
Number of Months	36	36	36	
Office Space****	108,000	36,000	-	144,000
Rental	3,000	1,000	-	
Number of Months	36	36	-	
<b>Total Government Contribution</b>	<b>632,880</b>	<b>171,720</b>	<b>66,600</b>	<b>871,200</b>

\* Number of officers including: 2 (Minister level), 6 (Director/Deputy Director General Level), 6 (Director

\*\* Average monthly salary. The average monthly salary is based on an hourly wage of \$8 and 8 working

\*\*\* It is expected that government staff input for components A (DSM) and B (DoIH) will be roughly 50%,

\*\*\*\* Valuations for the facilities and office space are based on current market price estimations

\*\*\*\*\* Per Month