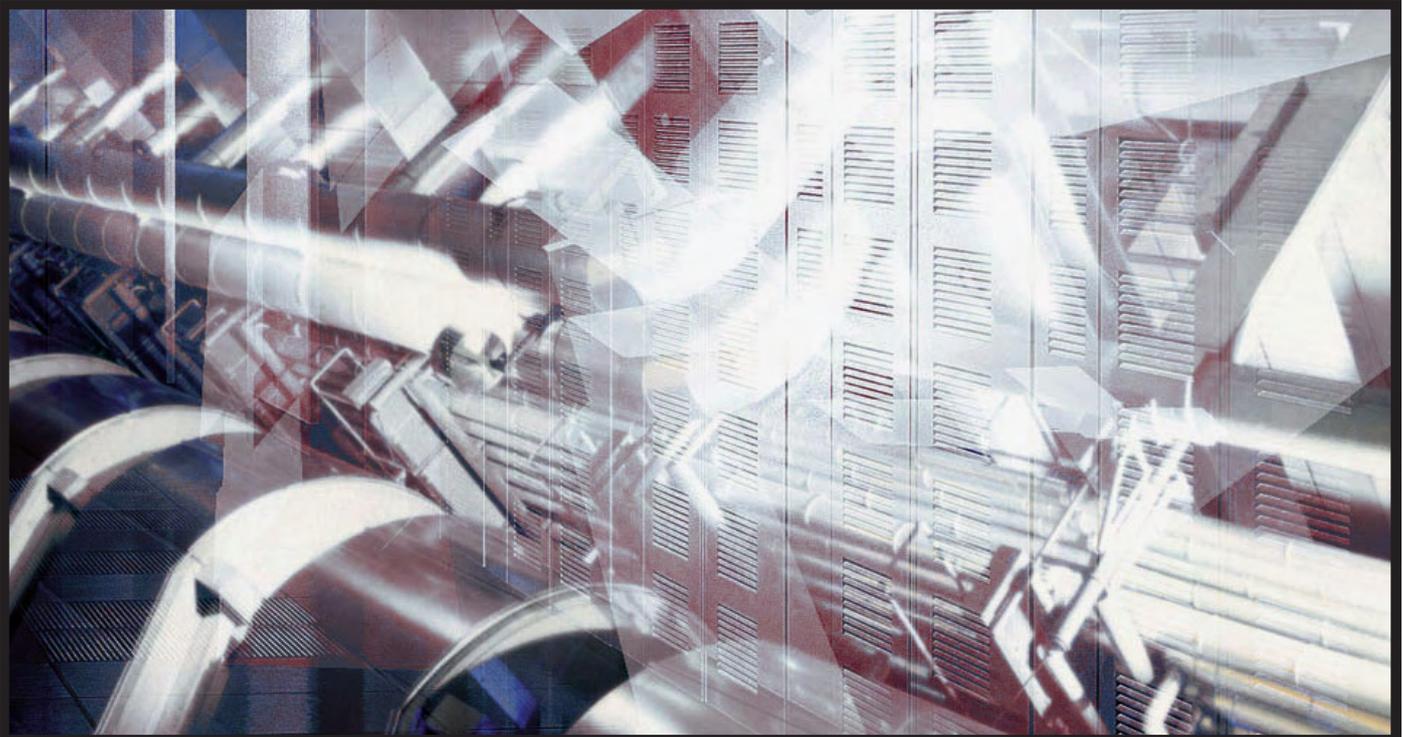




USAID | MOROCCO

FROM THE AMERICAN PEOPLE



Standardization in Morocco

Options for assistance

March 2006

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IBCM Report 06-01

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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List of acronyms

DAI	Development Alternatives Inc
FTA	Free Trade Agreement between the U.S. and Morocco
IAF	International Accreditation Forum
IBCM	The USAID project “Improving the Business Climate in Morocco” (Amélioration du climat des affaires au Maroc)
IEC	International Electrotechnical Commission
IMANOR	Moroccan Standards Body (successor to SNIMA)
ISO	International Organization for Standardization
SNIMA	Service de Normalisation Industrielle Marocaine (Standards and Certification Department at the Ministry of Industry and Trade)
SPS	WTO Sanitary and Phyto-sanitary Agreement
TBT	WTO Technical Barriers to Trade Agreement
WTO	World Trade Organization

Key Terms

Standard

A standard as defined by ISO is a document established by consensus and approved by a recognized body that provides for common and repeated use, rules, guidelines or characteristics for activities or their results aimed at achieving the optimum degree of order. International standards exist for products, services, quality and environmental management systems, measurements, conformity assessment, training, information and other fields.

Perhaps the most widely known standard in the world is the quality management standard ISO 9000. The standard is applied by over half a million companies worldwide. Any type of organization may apply the standard. Compliance with the standard requires setting operational checks and balances at all levels to ensure that the employed processes consistently meet applicable regulatory requirements, customer's quality requirements and seeks to improve quality and performance all the time.

Metrology

Metrology is the science of measurement. There are three main types of metrology:

- A. Scientific or primary metrology consists of maintaining the primary national standards of measurement and supporting the highest level of scientific measurement in the country.

All developed countries and many developing countries have their own national standards. These standards are important to ensure that measurements taken around the world are comparable and are of the required degree of precision. For example, how would we know that a Kilogram in France is the same as a Kilogram in the U.S. or a measurement of one Amp of electricity is the same everywhere? These standards that have a very high degree of precision are used to indirectly calibrate almost every instrument used in measurement in a country and then used in comparisons with other countries.

- B. Industrial Metrology addresses the calibration needs of industries using secondary or working standards to calibrate and verify the reference standards of calibration labs. These labs in turn provide calibration and verification services to the industry using their working standards.

- A. Legal metrology is a policing activity of ensuring that all measurements used in trade are accurate to ensure trade equity.

When you fill your car with 20 liters of gas, are you getting exactly 20 liters or less? Legal metrology inspectors ensure that you are getting what you paid for.

Conformity assessment

ISO defines conformity assessment as an activity concerned with determining directly or indirectly that relevant requirements are fulfilled. Conformity assessment is performed for regulated and non regulated products and services to verify conformance to a standard. This may involve assessment of the design process, the production process, the final product, the quality and environmental management systems, and personnel in some cases. The requirements for conformance are called out in the standard.

Here is an example of conformity assessment of a regulated product. For an X-ray machine to be placed on the market in Europe, it has to comply with EN60601, a European standard on electrical medical device safety. The machine goes through many tests to ensure that it meets both performance and safety requirements. In fact the conformity assessment of such a product with the applicable standards also involves a review of the design and production process to ensure that

adequate safety precautions were built into the product and that the production process will consistently produce a product of the same level of quality and specifications.

There are three types of conformity assessment:

- Self declaration by the producer or service provider: This is a risky approach unless the provider is well recognized for their quality.
- Buyer inspection and verification (Referred to as second party assessment): This method is expensive as it requires inspection and verification by each buyer.
- Third party certification: This method is the most preferred one and works quite well if the conformity assessment body is recognized both locally and internationally.

Accreditation

Confidence in the competence and the impartiality of the conformity assessment body is key to the acceptance of the certificates both locally and internationally. National accreditation bodies inspect the conformance of conformity assessment bodies to standards of operation to ensure their competence and impartiality. International standards exist for product certifiers, inspection bodies, testing labs, and quality and environmental management systems and personnel involved in conformity assessment.

Market surveillance

Advanced economies that allow self declarations of conformity by the producer require a tool to ensure that their markets are free from products that do not comply with the essential safety requirements. Furthermore market surveillance ensures fair competition by eliminating products from the market that attempt to undercut prices by bypassing these essential requirements. Specialized market surveillance authorities and customs typically carry out market surveillance.

Inspectors of market surveillance, would randomly purchase products from the market, for example from a grocery store, and carry a set of tests per the requirements set in a technical regulation that this particular product is supposed to comply with. For example, Milk products should pass certain microbiology and chemical tests to verify its quality and ensure it is safe for consumption. If the product is found to be non-compliant, an investigation is launched that could involve the police, and other authorities depending on the threat level.

Perinorm

Perinorm is a bibliographic database of information about the standards, draft standards and technical regulations of twenty one countries and international bodies. The database is updated monthly. Users using this tool can quickly learn what standards are available, what technical rules and regulations apply, which documents are about to be replaced and what is new about their replacement for each of the twenty one member countries.

1.0 Assignment description

The primary goal of this assessment was to review the standardization process in Morocco and study how SNIMA may utilize technology to improve efficiency and transparency. A secondary but just as important objective was to try to take note of the quality infrastructure restructuring process taking place at this time and lay out the methodology in which IBCM/DAI could support this reform to ensure a successful, efficient and effective transition that will bring Morocco close to full compliance with the U.S - Morocco Free Trade Agreement and the TBT agreement of the WTO.

2.0 Introduction

An effective and efficient quality assurance infrastructure is a prerequisite for economic development in any country. Global trends—the unification of markets, global industrial integration including relocation of production, and outsourcing, increasing demand for higher quality and environmental protection—are increasingly becoming dominating factors in the strategic thinking and design and implementation of economic development policies at the national level. In this world, a harmonized and internationally recognized quality assurance infrastructure is one of the key elements shaping the competitiveness of a country's economy, as it facilitates the exchange of goods and services in an efficient, timely and economic manner reducing the overall cost of doing business with economic agents in that country.

The basic elements of a quality infrastructure are standardization, metrology, conformity assessment, accreditation and market surveillance. The planning for and development of these elements is a matter of national economic development strategy. Establishing the organizational entities, developing their service capacities in strategic national sectors, and ensuring the ability of this infrastructure to adapt quickly to changes in target markets and global trends only comes about through careful planning supported by knowledge of international best practices and requirements in this field.

These basic elements are like links in a chain. If one element comes up short in its overall operational capacity, or in its ability to serve the needs of a given sector, the impact on overall trade and that sector's performance are easily felt in reduced exportability of goods, and reduced proceeds.

An effective quality infrastructure is also necessary to safeguard the safety and health of citizens, protect the health of animals and plants, and protect the environment. Technical regulations and enforcement mechanisms, including market surveillance that ensures the safety of goods, services and facilities, are key to meeting these needs. To the extent that these technical regulations reflect internationally harmonized standards, the infrastructure of laboratories and certification schemes aimed at domestic constituencies also facilitates trade and encourages foreign direct investment.

The focus of this report is on the standardization process and the use of ICT tools in improving efficiency and transparency of the process. However, key notes and recommendation on the overall state of the quality infrastructure are also included in this report.

3.0 Standardization in Morocco

SNIMA, a department under the Ministry of Industry and Trade, is the sole authority that can issue national Moroccan Standards, and certify to those standards and grant the NM conformity mark. SNIMA has developed to this date well over 5500 standards, most of which are based on international or EU standards. Standards development is carried out in accordance with the ISO/WTO code of good practice, even though the consultation process could be improved. SNIMA is the designated inquiry point for all WTO TBT related inquiries.

SNIMA acts as the secretariat to more than 78 technical committees that are housed in different ministries and in SNIMA. Six technical officers from SNIMA lead the work of these committees. The target for 2010 is to have adopted well over 10,000 standards.

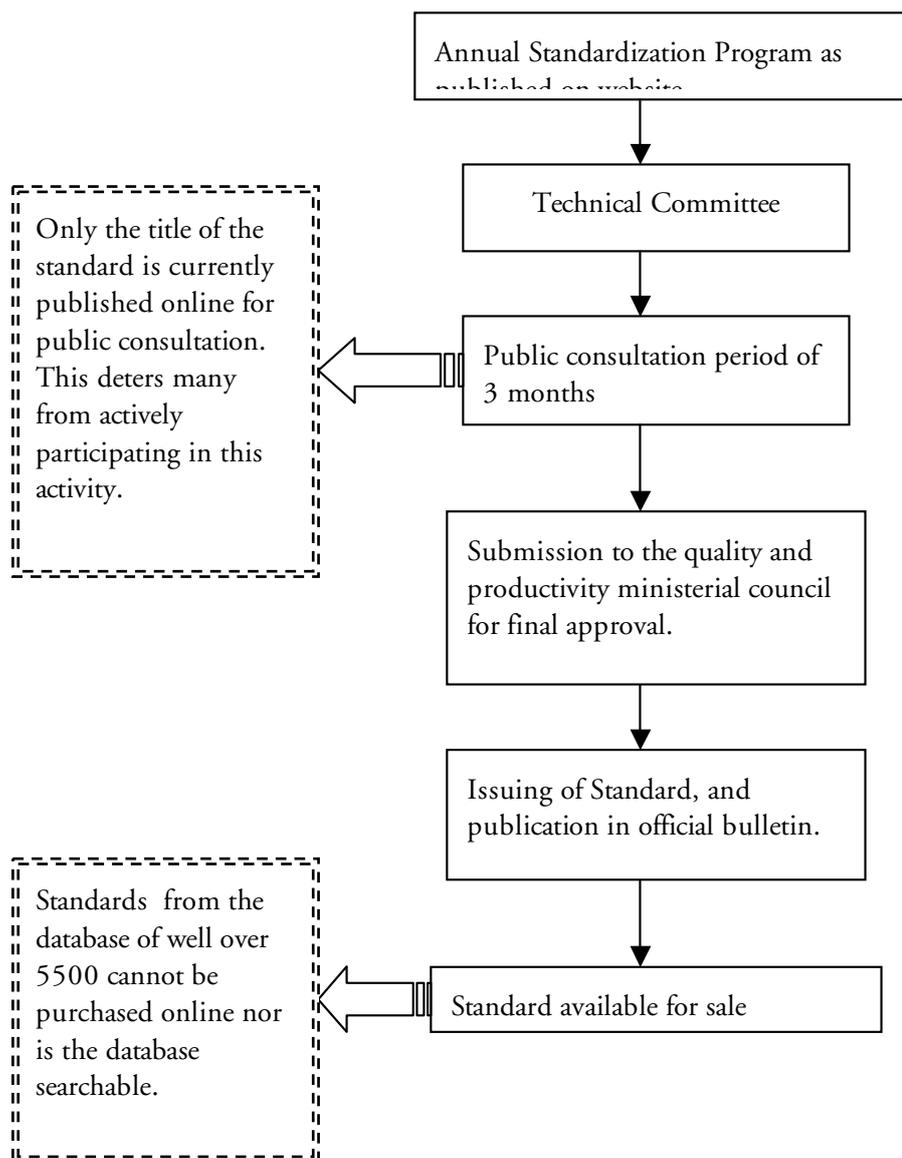
The chart on the next page depicts the standardization process at SNIMA. The things to note are that the public consultation process is cumbersome because only the title of draft standards are published without the full text and comments by different parties are not published online. Second the database of approved standards does not link to their website, and thus no search capability is available online, nor can you purchase these standards online. This discourages the public from taking an active role in commenting on draft standards and acquiring approved ones.

SNIMA claims that 600 - 800 standards are developed or adopted annually. However, the standardization department does not have a document control software that can guide the standardization process, keep track and secure the different versions of each standard.

With the limited resources available, SNIMA worked with the IT department at the Ministry of Industry and Trade to develop an Oracle based database that uses the ISO field descriptions to differentiate standards. An attempt to link this database to the website for search capability has failed due to the lack of adequate resources. Another resource related problem is that not all of the 5500 standards are in the database. Some 3,200 standards were only available in an outdated electronic format or as hard copies. At the moment through assistance from the EU, 1700 standards have been converted to full text documents, and are being entered into the database.

SNIMA's database and website are hosted at the Ministry and thus SNIMA does not have easy access to either, which further complicates the update and maintenance of both.

Figure 1: Standardization process in Morocco



4.0 Notes on the quality infrastructure in Morocco

Even though it is not the main objective of this assessment to review the structure and effectiveness of the Moroccan quality infrastructure, certain key issues stand out and are note worthy.

Morocco does not have an accreditation body, and thus labs, inspection and certification bodies may not be recognized by other countries. This renders much of Morocco's quality infrastructure useless for accessing export markets with the exception of foreign accredited conformity assessment bodies present in the country.

Morocco industrial regulation is still based on mandatory standards. Standards that are developed by SNIMA. Furthermore SNIMA is not an independent body, but rather a department of the Ministry

of Industry and Trade. This creates an environment in which over regulation of industries and imports is likely and could even lead to corruption, since the regulator, is the same entity that legislates the regulations, and provides the compliance services.

Notification and public consultation procedures for both standards and regulations are cumbersome in some cases, and not clear in other cases. Not until recently has Morocco notified the WTO on changes in regulations even though Morocco is a long time member of the WTO. From discussions with officials at SNIMA, it seems the problem is that no law or decree assigns the notification responsibility to any one entity.

As a result, Morocco is incompliant with the WTO TBT and U.S FTA TBT agreements. However, the good news is there is a great possibility that all this is about to change. SNIMA working with all the other Ministries has put forward a new law restructuring the quality infrastructure, and a decree that will create a supreme national council that would develop a national strategy and policies for an effective quality infrastructure.

The new law that is currently with the General Government Secretariat will basically transform SNIMA into a new independent organization (Semi-State) with a board of directors made up of equal members from the public and private sector. The new standards institute IMANOR will be the body responsible for the development of Moroccan Standards, and granting the Moroccan Conformity Mark MN. The law also establishes the Moroccan Accreditation Board with its secretariat housed in the Ministry of Industry and Trade.

SNIMA has published a strategy that is in line with this restructuring and in accordance with the new law. Implementing these fundamental changes will bring Morocco closer to full compliance with WTO and US FTA TBT. More importantly, if under this new structure, Morocco adopts the EU new approach to issuing technical regulations, and the global approach for conformity assessment, then Morocco should be in a position to sign mutual recognition or be part of multi lateral recognition agreements.

5.0 Recommendations

IBCM/DAI must support these reform efforts to ensure successful restructuring of the quality infrastructure. Specifically IBCM/DAI should follow closely the progress of the law and provide support as needed. On the long run this change will improve the competitiveness of Moroccan products by reducing time to market and transaction costs. It will also facilitate effective and efficient market surveillance and import monitoring programs that promotes public safety.

The suggested support program is comprised of two phases. Phase I is preparation of SNIMA for its new structure and role with a focus on standardization pending the approval of the new law. In phase II, a more in depth assessment of the new quality infrastructure has to take place sometime after the dust settles. At the same time assistance must be provided to the accreditation board to commence operations based on internationally acceptable practices. It is also important to study sector specific issues in accessing new markets and how this new structure can develop the needed services to provide local solutions to technical barriers in export markets.

5.1 Support Program Phase I

In phase I IBCM/DAI will assist SNIMA in developing a number of ICT tools and capabilities that will enable SNIMA to execute its role in standardization as defined by the new law and the agreements Morocco have signed with the U.S and the WTO.

1. Transfer of Database and Website to SNIMA:

The Ministry of Industry and Trade at the moment manages the database and website of SNIMA. As SNIMA becomes independent, it will need to take over these functions ensuring that adequate financial and human resources are available to properly use these tools to serve their clients and ensure compliance with agreements such as the WTO TBT and the U.S. FTA agreement. IBCM/DAI should assist SNIMA in the transfer of the database and website to a server available at SNIMA. If one is not available IBCM/DAI should supply one along with the necessary backup equipment and security software. SNIMA will have to provide all other needed infrastructure including internet access, local network and dedicate at least one staff member for the update of the website and database.

2. Enable SNIMA to conduct the consultation process for new standards on line:

One of the requirements of both the U.S. FTA and WTO TBT is the transparency of the standardization process and open consultation of the public for all new standards. At the Moment SNIMA allows an adequate three months period for consultation, and publishes a list of their draft standards in one file on their website. An outsider would have to request a copy in writing and would then have to fax the comments. The process is cumbersome. Developed countries carry out this process online. IBCM/DAI should provide a website developer to SNIMA to develop the website such that draft standards can be uploaded to the website using a password protected user interface. The upgrade should also allow the general public to register online, and provide comments on each standard. The website has to be capable of archiving the comments and the final decision of the technical committee online. SNIMA is committed to use these features once installed for all its standardization work.

3. Assist SNIMA in responding to Notifications by other countries:

Morocco in the U.S FTA and the WTO TBT has agreed to review and comment as needed on changes in technical regulations by the U.S or other members of the WTO. At the moment there is no process by which these notifications are distributed in Morocco. IBCM/DAI should provide assistance to develop the website to have the capability of posting notifications by other countries on the website as well as allowing Moroccan users to sign up for an automatic E-mail notification service that is based on the field of interest. Registered users shall also be able to post related comments on the website. SNIMA will use this capability to communicate back any feedback from Morocco.

4. Financial management capacity building:

The Project staff should work with staff at SNIMA to identify the most effective accounting software package to manage the finances of the new organization. The software has to have local support. As soon as SNIMA makes available staff members for the financial department, IBCM/DAI should install this software at SNIMA, providing one or two computers if needed, as well as training on the software.

5. Development of a database for managing SNIMA standards and communicating with Perinorm:

SNIMA has put much effort in developing an Oracle based database for the management of their standards. The database still suffers from few problems. It does not allow SNIMA to communicate with the ISO, and Perinorm databases nor is it able to communicate with the website for search capability. IBCM/DAI should work with SNIMA to develop a project document revising the functionality of the database and then issue a tender for a local database developer to implement the work needed to realize the functionality required by SNIMA.

The new database should allow SNIMA to become a member of Perinorm, and thus publish information about their standards, draft standards, and technical regulations internationally. SNIMA has to commit to dedicating resources to populate the database with the data from current standards, joining Perinorm, and using the database to communicate with the ISO and Perinorm databases periodically to provide the necessary updates on Moroccan and international standards.

As part of preparations for this consultancy I had a discussion with Perinorm secretariat in Germany and they have already expressed great interest in having Morocco join the database and promised a favorable distribution agreement. In addition, a discussion with the Standardization Board of Canada (BNQ), which has developed a similar Oracle based tool in French, has resulted in their readiness to provide technical guidance for the implementation of this task. Follow up on both leads is key for the success of this task.

6. Development of a document control tool for the management of the documents of the standardization process:

SNIMA annually adds about 700 standards to its compendium of Moroccan standards. Each standard goes through a process of reviews by experts and the public before being issued as a standard. Currently the process of keeping track of the different revisions is manual and may lead to errors. IBCM/DAI should help SNIMA in using an off the shelf document control software for the management of standards during the standardization process and those approved. This task may actually be implemented through EU assistance to SNIMA, and thus the task can be postponed pending the delivery of the scope of the new EU Program.

The above tasks were developed in close coordination with SNIMA Director and staff. A draft Memorandum of Understanding to jump start this program of assistance is attached in Annex A. IBCM/DAI should review and sign this MOU with SNIMA as soon as practical to start this program.

A functional description of the database and website in French is attached in annex B. This document should be used to develop the tender for choosing a local information technology firm to develop these capabilities. It is recommended that IBCM/DAI hires a part time IT expert to manage all of Phase I, IT related activities including the tendering of the database development. After conducting interviews of several candidates from Rabat and Casablanca, at least two candidates made it to the short list. IBCM/DAI should hire one of those candidates or someone else with similar qualifications.

A brief action plan to implement the program in Phase I is attached in annex C.

5.2 Support Program Phase II

IBCM/DAI should keep track of the new legislation and provide support where necessary. It is important to note here that a full review of all quality infrastructure related laws, proposed and existing including the one for metrology, and market surveillance if one exists is needed to determine if the regulatory environment is in compliance with best practices and bilateral and multi lateral agreements.

Once the law is passed, the Accreditation Board should operate in accordance with the latest international guides for accreditation bodies. The accreditation body should be assisted to join IAF and ILAC and implement their standards of operations. A twinning arrangement with another country's accreditation system for the development of the body's operations and procedures will go a long way to facilitate the recognition of the accreditation body. IBCM/DAI should work with the new Board to attempt to realize such an arrangement.

A reassessment of the quality infrastructure with a focus on exporting industry needs in coordination with the new supreme national council should be undertaken after a period of time. The assessment should outline a strategy and specific goals to achieve recognition of the ability to certify local production to meet market entry requirements.

In the mean time and as this infrastructure is being developed, IBCM/DAI and IMANOR/SNIMA should work together on alternate solutions to meeting the needs of different export sectors. IBCM/DAI in cooperation with other USAID and MEPI programs such as IESC can coordinate efforts to address any quality related challenges in accessing the U.S markets. IESC can provide firm level technical assistance, while IBCM/DAI can provide the assistance to local service providers and national organizations that provide cross sector quality related services to resolve issues at a sectoral level. The first step would be to map out the priority export oriented industries, prioritize their target markets, list the relevant technical regulations and list the available services local producers can tap into for compliance. This map would lay out the opportunities and impediments for export development in relation to technical barriers to trade. This particular task may be started in parallel with activities from Phase I.

References:

1. Commercial Law Development Program (CLDP), *U.S.-Morocco Free Trade Agreement (FTA): The state of Moroccan compliance with FTA commitments*. June 2005.
2. ISO/IEC Guide 59 Code of Good Practice for Standardization, first edition 1994.
3. SNIMA 2004 Strategy, <http://www.mcinet.gov.ma/snima/>

Annex A: Draft Memorandum of Understanding

DRAFT FOR INTERNAL DISCUSSION ONLY, NOT FOR DISTRIBUTION OUTSIDE
THE PROJECT AND USAID

Memorandum of understanding

PREAMBLE:

GIVEN the main objective of the new strategy of the Moroccan Standards Institute hereinafter referred to as SNIMA, to:

Enable the Moroccan system of standardization and certification to play a key role in the socio economic development of the country and to efficiently assist Moroccan businesses in their endeavors towards improved market access,

RECOGNIZING the efforts of SNIMA to pass new laws that would

- A) lead to their independence from the Ministry of Industry and Trade to form the new Moroccan Standards Institute (IMANOR) in order to avoid conflict of interest and provide more transparency in regulating industries,
- B) and restructure the standardization process, and the development and enforcement of technical regulations in pursuit of international best practices specifically the EU new approach to regulating industries,

NOTING that these efforts which are based on SNIMA strategy will improve drastically the compliance of Morocco with the WTO TBT agreement and the U.S Morocco Free Trade Agreement in the area of technical barriers to trade,

GIVEN the mandate of the USAID project, Improving the Business Climate of Morocco, managed by Development Alternatives (DAI), hereinafter referred to as IBCM, to assist the Government's efforts to forge a legal and regulatory policy framework, build the institutions necessary to promote the growth of competitive businesses and accelerate the pace of job creation and provide support for the effective implementation of regulatory reforms to enhance the competitiveness of the country's economy, and build the regulatory and judiciary systems and institutional capabilities needed,

NOTING the shared objectives, SNIMA and IBCM/DAI agree to enter into this Memorandum of Understanding (MOU), to assist SNIMA in its transition to an independent semi-state agency, and in fulfilling its new strategy and mandate under the new laws.

Scope of cooperation:

SNIMA in becoming an independent body will have many immediate needs. It is expected that the Ministry will turn over to SNIMA their standards data base, and website. Both tools require more development to ensure better transparency in the standardization process and in facilitating trade with the U.S and other countries. Furthermore, SNIMA will also have to manage its own finances, and will thus need capacity building in financial management.

SNIMA and IBCM/DAI agree to cooperate on the following list of activities. This list is neither comprehensive nor set in stone. Changes and adjustments will be made and agreed on between the parties based on needs, the EU program of assistance, and IBCM/DAI budget constraints.

1. Transfer of Database and Website to SNIMA:

The Ministry of Industry and Trade at the moment manages the database and website of SNIMA. As SNIMA becomes independent, it will need to take over these functions ensuring that adequate financial and human resources are available to properly use these tools to serve their clients and ensure compliance with agreements such as the WTO TBT and the U.S. FTA agreement. IBCM/DAI will assist SNIMA in the transfer of the database

and website to a server available at SNIMA. If one is not available IBCM/DAI will supply one and supply the necessary backup equipment and security software. SNIMA has to provide all other needed infrastructure including internet access, local network and dedicate at least one staff member for the update of the website and database.

2. Enable SNIMA to conduct the consultation process for new standards on line:

One of the requirements of both the U.S. FTA and WTO TBT is the transparency of the standardization process and open consultation of the public on all new standards. At the Moment SNIMA allows an adequate three months period for consultation, and publishes a list of their draft standards in one file on their website. An outsider would have to request a copy in writing and then can send comments. The process is cumbersome. Developed countries carry out this process online. IBCM/DAI will provide a website developer to SNIMA to develop the website such that draft standards can be uploaded to the website using a password protected user interface. The upgrade will also allow the general users to register online, and provide comments on each standard. The website will also be capable of archiving the comments and the final decision of the technical committee online. SNIMA is committed to use these features once installed for all its standardization work.

3. Assist SNIMA in responding to Notifications by other countries:

Morocco in the U.S FTA and the WTO TBT has agreed to review and comment as needed on changes in technical regulations by the U.S or other members of the WTO. At the moment there is no process by which these notifications are distributed in Morocco. IBCM/DAI will develop the website to have the capability of posting notifications by other countries on the website as well as allowing Moroccan users to sign up for an automatic E-mail notification service that is based on the field of interest. Registered users shall also be able to post related comments on the website. SNIMA will use this capability to communicate back any feedback from Morocco.

4. Financial Management Capacity Building:

IBCM./DAI will work with staff at SNIMA to identify the most effective and efficient accounting software package. The software has to have local support. As soon as SNIMA makes available staff members for the financial department, IBCM/DAI will install this software at SNIMA, providing one or two computers if needed, as well as training on the software. SNIMA is committed to use the software in budgeting, accounting and overall financial management.

5. Development of a database for managing SNIMA standards and communication with Perinorm:

SNIMA has put much effort in developing an Oracle based database for the management of their standards. The database still suffers from few problems. It does not allow SNIMA to communicate with the ISO, Perinorm databases nor is it able to communicate with the website for search capability. IBCM/DAI will work with SNIMA to develop a project document revising the functionality of the database and then issue a tender for a local database developer to implement the work needed to realize the functionality required by SNIMA. The final approval of this task by IBCM/DAI depends largely on the availability of funds to cover the associated costs. SNIMA is responsible to secure financial resources to purchase the needed licenses and yearly maintenance of the software. The new database will allow SNIMA to become a member of Perinorm, and thus publish information about their standards, draft standards, and technical regulations internationally. SNIMA is committed to dedicating resources to build up the database with the data from current standards,

joining Perinorm, and using the database to communicate with the ISO and Perinorm databases periodically to provide the necessary updates on Moroccan and international standards. A project document will be developed and agreed upon between the two parties prior to launching this task.

6. Development of a document control tool for the management of the documents of the standardization process:

SNIMA annually adds about 700 standards to its compendium of Moroccan standards. Each standard goes through a process of reviews by experts and the public before issued as a standard. Currently the process of keeping track of the different revisions is manual and may lead to errors. IBCM/DAI will help SNIMA in using an off the shelf document control software for the management of standards during the standardization process and those approved. This task may actually be implemented through EU assistance to SNIMA, and thus the task depends on the scope of the new EU Program and the availability of funds at IBCM/DAI.

It is understood that IBCM/DAI will provide the necessary training for SNIMA to be able to use these tools and keep them updated.

Terms and conditions:

1. For the purposes of implementing this Memorandum of Understanding, SNIMA and IBCM/DAI have appointed Mr. Hicham Taghouti and Ms. Farah Maghni as principle coordinators responsible for managing the SNIMA IBCM/DAI relationship and program development to ensure the highest level of cooperation. Mr. Sani Daher will act as the overall technical advisor for the project.
2. SNIMA and IBCM/DAI shall respect and protect the confidentiality and sensitivity of all data, information and conclusions and recommendations that arise from activities under the scope of this MOU.
3. The key programs and activities will be further developed and better defined by both parties in letters of agreement or project documents. The letters of agreement and project documents shall set out in details, the work to be undertaken, persons authorized by SNIMA and IBCM/DAI to carry out the program of work, expected duration of the program, results to be achieved, performance measurement criteria for the work to be done, progress towards its completion, the agreed upon fees, charges, and other costs that may arise in its implementation and how they are allocated.
4. SNIMA and IBCM/DAI agree that each of the persons authorized under clause 1 of the terms and conditions section of this MOU shall be assigned the appropriate responsibility, authority and duties to carry out the terms and conditions of this Memorandum of Understanding, in accordance with, and subject to, the internal policy and procedural formalities of the respective organizations.
5. This Memorandum of Understanding shall be reviewed after twelve months from the date of its coming into effect, and may be renewed, altered, amended or modified following such review based upon a written agreement.
6. Each party reserves the right to cancel this agreement by providing a written notice pointing out the reason for cancellation.

Originals and commencement date

This Memorandum of Understanding is drawn up in two originals and shall come into effect on the first working day following its signing and dating.

DELEGATES:

SNIMA has nominated and authorized Mr. Abdellah Nejjar, to sign and date this Memorandum of Understanding.

IBCM/DAI has nominated and authorized Mr. Ulrich Ernst, Chief of the Party, to sign and date this Memorandum of Understanding.

Signed and dated

On behalf of SNIMA by:

Signed and dated

on behalf of IBCM/DAI by:

Date:

Date:

Annex B: Functional Specifications of Standards Database and SNIMA website in French

I- Introduction

Avec la mise en place d'une zone de libre échange avec le Etats Unies et la baisse progressive des barrières tarifaires, il est désormais indispensable pour la Maroc de maîtriser les flux d'information relatifs aux normes, règlements techniques, et aux procédures d'évaluation de la conformité.

Dans ce contexte, la diffusion aux industriels et aux exportateurs nationaux et américains d'une information technique fiable, dans des délais raisonnables aux demandeurs intéressés devient difficile la mise en place au sein du Service de Normalisation Industriel Marocaine (SNIMA), l'organisme chargé de la coordination des travaux de normalisation au niveau national, un système d'information *moderne, intégré* et *ouvert* sur l'extérieur.

2- Objectifs

2-1 -Objectif global

Mettre en place un système d'information global et intégrée des projets de normes marocaines (PNM), normes marocaines (NM) et documents normatifs marocains qui :

- ✓ Permet la création d'une NM ou un PNM, sa mise à jour et sa révision ;
- ✓ Conserve l'historique des normes marocaines révisées ou annulées ;
- ✓ Donne une information de synthèse et de pilotage (tableaux de bord et états d'avancement) ;
- ✓ Permet d'automatiser la production de certaines publications autres que les normes destinées à l'extérieur (Catalogue, officiel des normes,...) ;
- ✓ Permet à la collection des NM et des règlements techniques marocains d'être présents dans les collections référencées et consultables dans le service Perinorm ;
- ✓ Soit ouvert en interne sur le système de gestion des ventes et en externe sur le système de normalisation international ISO ;

2.2- Objectifs spécifiques

Ce système devra permettre au SNIMA de :

- Présenter sur son site web les PNM à l'enquête publique en vue de faciliter davantage la participation des opérateurs économiques marocains et américains dans le processus de normalisation marocaine, en leur permettant de faire leurs commentaires en ligne sur les PNM qui les intéressent ;
- Présenter sur son site web le programme de travail et le catalogue des NM et des normes internationales (ISO), avec la possibilité de chercher, commander et acheter les NM.
- Diffuser le catalogue des NM sous format CD-ROM

3- Scénarios du développement et d'hébergement retenus

3-1 Scénario de développement retenu

Dans le cadre de la modernisation de ses méthodes de travail par l'utilisation des nouvelles technologie de l'information, le SNIMA a engagé en collaboration avec la division informatique du Ministère chargé de l'Industrie un projet de développement d'un système d'information et de

gestion des normes marocaines (SIGNM). Ce projet qui a démarré en 2003 (voir annexe 1 : fiche sur ce projet) a permis la réalisation des phases suivantes :

- L'étude conceptuelle du système souhaité
- La conception de l'architecture du système : structure de données et applications.
- Le développement du système : codage des modules applicatifs
- La mise en œuvre et le déploiement du système
- Information en ligne (inetrnet)

Ce système existant sera pris en compte ou non en totalité ou en partie dans celui qui sera mis en place en collaboration avec l'USAID en fonction du résultat de l'audit qui sera réalisé avant le démarrage des travaux.

3-2 Scénario d'hébergement retenu

Le futur système qui sera mis en place, notamment la base de données et le site web seront logés dans les locaux du SNIMA. Une étude sera menée par l'USAID pour déterminer les équipements et les logiciels nécessaires à ce sujet (serveurs, firewall, ...).

4- Fonctionnalités demandées

4.1- le système de gestion global et intégrée des NM, PNM et documents normatifs marocains

Gestion de la saisie des normes, projets de normes marocaines et documents normatifs marocains: permet la création d'une norme en vigueur ou un projet ou un document normatif, sa mise à jour et sa révision et/ou l'annulation. Le système doit permettre de lier les attributs de la norme avec le texte de cette norme (voir annexe2 : liste des attributs d'une norme marocaine).

- Accueil par le système des données importées de l'ISO (voir annexe 3 : manuel ISONET)
- Production par le système d'un fichier conforme aux standards de Perinorm (voir annexe 4 : Perinorm field spécification). La priorité sera accordée, dans une première phase aux données relatives aux normes marocaines. Les données concernant les règlements techniques marocains seront étudiées dans une deuxième phase.
- Le système devra permettre le formatage et la mise en forme de certaines éditions techniques standards (voir annexe 5 : liste des éditions interne et externes)
- Le système devra permettre l'extraction et l'export du côté du serveur de la base bibliographiques des NM des données vers le système de gestion des ventes et vise versa.

4.2- Site web

- Mettre en ligne le catalogue des NM et internationale (ISO) , le programme annuel de normalisation et les PNM à l'enquête publique:

- Programme annuel de normalisation
 - Consultation du programme en cours par CT
 - Formulaire de demande de participation
- Consultation du catalogue

- Recherche simple (mots clés et référence) + recherche avancée (intervalles de date,...) + recherche guidée (ICS)
- Affichage d'une liste de NM et internationales trouvées
- Choix d'une ou plusieurs NM,
- Bon de commande d'une NM + un accusé de réception
- Devis pour une internationale (ISO)

- Achat en ligne des NM :

- Enregistrement de l'utilisateur
- Facturation
- Bon de commande
- Choix du mode de paiement
- Paiement
- Téléchargement de la norme

- Consultation des PNM à l'enquête publique

- Enregistrement de l'utilisateur
- Téléchargement du document après vérification
- Commentaire
- Transmission par email avec accusé de réception
- Archivage du commentaire

Annexe I : Projet de développement du système d'information et de gestion des normes marocaines

SIGNM

Contexte

Ce projet s'inscrit dans le cadre du renforcement de l'infrastructure en matière des technologies de l'information et de la communication du Service de Normalisation Industrielle Marocaine (SNIMA) notamment en matière de diffusion et de gestion de l'information normative.

Objectif

- L'informatisation du système de gestion et d'information des normes marocaines ;
- L'informatisation des états de sorties utilisés en interne, ainsi que les produits d'information normatifs destinés aux opérateurs économiques.
- La mise en ligne des données bibliographiques sur les normes marocaines.

Partenaire

Division informatique de ce département

Activités réalisées

Activités	Observations
Etude conceptuel	
Préparation des tables de codifications	-
Préparation des masques de saisie des normes marocaines en vigueur, projet de normes marocaines et des comités techniques de normalisation	-
Saisie de quelques 3000 normes marocaines	-
Développement du module Internet (pages dynamiques)	Modulé réalisé mais attends la fin de la saisie des données

Annexe 2: liste des attributs d'une norme marocaine

Champs	Définition du champ	Observations
Référence	Alphanumérique	- Unique. - il S'écrit selon l'origine de la norme. Exp : NM ISO 9001 si l'origine est une norme internationale. NM 06.1.003 si l'origine de la norme est autre.
Domaine d'activité	Domaine d'activité de la norme Alphanumérique	Exp : 06-Électricité. C'est une liste ouverte des domaines d'activités (environ 30 domaines d'activités)
Sous domaine d'activité	Sous domaine de la norme Alphanumérique	Exp : 06.1- installations électriques Liste ouverte des sous domaines
Indice de classement	Numérique	Unique Exp : 05.8.001
Titre	Titre de la norme Alphanumérique	Peut contenir des parentaises et des tirets
Date de publication	Année d'édition de la norme Numérique	Exp : 1998
NM obligatoire	Alphabétique	Liste simple (oui ou non), renseigne si la norme est obligatoire ou pas. ((actuellement, on compte plus de 90

		normes obligatoires))
Révision	Ce champ indique si la norme est une norme révisée ou pas.	Liste simple (oui ou non)
Remplace	Référence de la norme révisée	
Correspondance	Référence et date de publication de la norme internationale ou étrangère correspondante	Exp : - ISO 9001 :2000 NF A 60 CODEX... Une correspondance unique par norme marocaine.
Degré de correspondance	alphabétique	Liste fermée 3 degrés de correspondance : identique ; modifié ; non équivalent.
Pagination	Numérique	Exp : 7p.
Prix	Numérique	18 dh
Comité technique de normalisation	Comité responsable de l'élaboration de la norme	Liste ouverte des comités techniques de normalisation (environ 80 comités) Exp : matières plastiques
Secrétariat du comité technique de normalisation	Départements ministériels assurant le secrétariat du comité	Liste ouverte des départements ministériels
Numéro du bulletin officiel (BO)	Numérique	Exp : numéro 111
Date du BO	Date de parution	Jour/mois/année

	de la norme au BO	Exp : 02/03/1999
Numéro de l'arrêté d'homologation	numérique	Exp : 932-90
Date de l'arrêté d'homologation	numérique	Jour/mois/année Exp : 02/03/1999
Date du CSIQP	Date d'approbation de la norme par le conseil supérieur interministériel de la qualité et de la productivité	Jour/mois/année Exp : 02/03/1999
ICS	Classification internationale des norms	Chaque norme possède au moins 1 ICS et au maximum 3 ICS
Descripteur		
Sommaire	Sommaire de la norme	
Résumé	Résumé de la norme	
Références croisées	Ce champ liste toutes les références des normes citées en référence.	

Annexe 3 : ISONET manual

(This 130 page field specification document can be downloaded from www.iso.org, or obtained from SNIMA)

Annexe 4: Perinorm Field Specification

(Also omitted for brevity, can be obtained from SNIMA or www.perinorm.org)

Annexe 5: Liste des éditions internes et externes*Editions internes:*

Etat1 : Bilan des travaux de normalisation : cet état permet de déterminer, dans une période donnée, le nombre de normes à n'importe quel stade et selon des critères de recherche ;

Etat2 : Suivi des travaux de normalisation : cet état permet de lister, dans une période donnée, toutes les normes marocaines qui ont atteint un stade précis ;

Etat3 : Etablir des statistiques sur les types des normes adoptées.

Par exemple le nombre de norme à base de normes ISO adoptées dans une période donnée.

Etat 4 : Répartition des comités techniques de normalisation par cadre. Une première liste permet d'afficher des informations sur les comités techniques de normalisation, une seconde spécifie les comités qui n'ont pas encore tenu de réunion, et une troisième édite les comités qui sont en cours de création.

*Editions externes :***I- OFFICIEL DES NORMES:**

L'officiel des normes est une édition qui comprend trois sections :

- les nouvelles normes homologuées ;
- les normes annulées ;
- les normes en enquête publique.

Section des normes homologuées

Cet état permet de lister, par comité technique, toutes les normes homologuées qui ont atteint le stade 60.60 et dont la date BO est comprise dans une période saisie par l'utilisateur. L'utilisateur sera donc amené à saisir uniquement la date début et la date fin de sa requête.

Les informations affichées sont le domaine, le sous domaine, la référence, le mois et l'année de publication, le titre, la correspondance, l'indice de classement, le nombre de page ainsi que le prix. Si une information n'est pas disponible, il faut la remplacer par « -- »

Section des normes en enquête publique

Cet état permet de lister, par comité technique, toutes les normes qui ont atteint le stade 40.20 et dont la date de clôture est supérieure ou égale à une date saisie par l'utilisateur.

Les informations affichées sont le comité technique, la référence de la norme, son titre, son indice de classement ainsi que la date de clôture de l'enquête. Si une information n'est pas disponible, il faut la remplacer par « -- »

Section des normes annulées

Cet état permet de lister toutes les normes qui ont atteint le stade 95.99 et dont la date du stade actuel est comprise dans une période saisie par l'utilisateur. L'utilisateur sera donc amené à saisir uniquement la date début et la date fin de sa requête.

Les informations affichées sont la référence, l'indice de classement et la date de la norme annulée ainsi que la référence, l'indice de classement et la date de la norme de remplacement. Si une information n'est pas disponible, il faut la remplacer par « -- »

2. PROGRAMME SEMESTRIEL DE NORMALISATION

Le programme semestriel de normalisation est une édition qui permet de lister, par comité technique, toutes les normes dont le stade est strictement inférieure à 60.60.

Les informations affichées sont le comité technique, l'indice de classement de la norme, son titre, son stade, son ICS ainsi que la correspondance. Si une information n'est pas disponible, il faut la remplacer par « -- »

3. LE CATALOGUE DES NORMES MAROCAINES

Le catalogue des normes marocaines est une édition qui comporte la liste complète des normes marocaines en vigueur. Pour faciliter la recherche et la consultation, les normes doivent être classées selon la classification internationale (par ICS). Des listes par ordre numérique et par comité technique doivent également être affichées. Le catalogue doit contenir en outre un index alphabétique et une liste des normes annulées.

3.1 Classification internationale pour les normes :

Dans ce module, on reprend la classification donnée par l'ISO.

3.2 Liste des normes marocaines classées par ICS :

Les normes marocaines doivent être classés dans cette édition par ICS.

3.3 Section des normes annulées

Cet état permet de donner la liste complète des normes annulées (normes ayant atteint le stade 90.20). Les informations affichées sont la référence, l'indice de classement et la date de la norme annulée ainsi que la référence, l'indice de classement et la date de la norme de remplacement. Le code du comité technique correspondant est également affiché.

3.4 Liste par ordre numérique

Cet état, affiché sous forme de tableau à 6 colonnes (2 blocs à 3 colonnes chacun) permet de faciliter la recherche et la consultation aux utilisateurs du catalogue. La première colonne donne, par ordre croissant, la liste complète des **indices de classement** des normes marocaines, la deuxième donne les comités techniques correspondants. La troisième colonne donne les pages correspondantes à l'emplacement des normes.

3.5 Liste par ordre de comité technique

Cet état reprend l'état précédent sauf que cette fois ci le tri est fait par ordre croissant des **comités techniques** de normalisation. .

3.6 Liste des comités techniques :

Sous format d'un tableau, cet état permet de lister tous les comités techniques avec ordre croissant des codes.

3.7 Liste des correspondances

Cette état permet de lister les normes internationales reprises en normes marocaines. Il renferme les informations suivantes :la référence internationale, la référence marocaine, l'indice de classement et le degré de correspondance.

Annex C : Draft Action Plan for Phase I

Draft Action Plan

To help start things off, the following action plan details the steps to be taken to achieve the objectives laid out in the draft MOU between IBCM/DAI and SNIMA. Each activity is assigned to one or more resources. Farah Maghni will lead this project and consult with Sani Daher at DAI home office as needed.

Activity 1 Transfer of database And website to SNIMA

Step 1: Hiring of a Technical Coordinator and a Web Developer

- Initiate search for Oracle Developers and Web developers (FARAH MAGHNI)
- Screening of resumes (SANI DAHER+FARAH MAGHNI)
- Interviews (SANI DAHER+FARAH MAGHNI)
- Verification of references (FARAH MAGHNI)
- STTA hiring process (FARAH MAGHNI)

Step 2: Development of Technical Specifications

- Specification of equipment and software for database transfer (AHMED HAZZAF+HICHAM TAGHOUTI)
- Coordination between SNIMA and DAI (FARAH MAGHNI)

Step 3: Assessment of the existing equipment and system in use

- Determination of adequacy of the equipment and system currently at SNIMA (AHMED HAZZAF)
- Determination of Bill of Materials (AHMED HAZZAF)
- Quotations (FARAH MAGHNI)
 - o Choosing a company (AHMED HAZZAF)
 - o Purchase of the equipment (FARAH MAGHNI)

Step 4: Fieldwork

- Installation of the server, the back up unit and security software (AHMED HAZZAF)
- Upgrading the equipment/Use of the server/ making sure it works properly (AHMED HAZZAF)
- Reporting (FARAH MAGHNI)

Activity 2 Enable SNIMA to conduct the consultation process for new standards on line

Step 1: Development of Technical Specifications

- specifications for the website development (AHMED HAZZAF +HICHAM TAGHOUTI)
- Estimation of time needed to develop the website (HICHAM TAGHOUTI+AHMED HAZZAF)

Step 2: Website Development

- Website development (AHMED HAZZAF)
- Updating the website/ making sure it works properly (AHMED HAZZAF)
- Checking the functionality of the website (AHMED HAZZAF+FARAH MAGHNI)

- Reporting (FARAH MAGHNI)

Activity 3 Assisting SNIMA in responding to notifications

Step 1: Development of Technical Specifications

- Specifications of website functionalities (HICHAM TAGHOUTI+ AHMED HAZZAF)

Step 2: website functionalities operational

- Development of the website functionalities (AHMED HAZZAF)
- Upgrading the website/ making sure it works properly (HICHAM TAGHOUTI+ AHMED HAZZAF)
- Reporting (FARAH MAGHNI)

Activity 4 Financial management capacity building

Step 1: TECHNICAL ASSISTANCE

- Ask SNIMA Director to designate a financial team (HICHAM TAGHOUTI)
- Specifications of financial management software capabilities (AHMED HAZZAF+SNIMA FINANCIAL TEAM)
- Identification of software package (SNIMA FT+AHMED HAZZAF+ SANI DAHER)

Step 2: MATERIAL ASSISTANCE

- Purchase of needed computers if needed
 - o Quotations (FARAH MAGHNI)
 - o Choosing a company (AHMED HAZZAF)
 - o Purchase of the equipment (FARAH MAGHNI)
- Training SNIMA's staff on the financial software (AHMED HAZZAF)
- Installation of the software+ interface with website e-commerce tool (SNIMA FT+AHMED HAZZAF)
- Verification of use of software+ reporting (AHMED HAZZAF+FARAH MAGHNI)

Activity 5 Development of SNIMA Standards Database

Step 1: Development of Project Document (SANI DAHER+HICHAM TAGHOUTI)

- Specifications of database functionalities (AHMED HAZZAF+HICHAM TAGHOUTI+SANI DAHER)
- Preparing a tender document (AHMED HAZZAF+ FARAH MAGNI)

Step2 Hiring a subcontractor company¹

- Issuing of a public tender document (AHMED HAZZAF+FARAH MAGHNI)
- Quotations (FARAH MAGHNI)
- Choosing a company (AHMED HAZZAF +SANI DAHER)
- Setting up the contract (FARAH MAGHNI+AHMED HAZZAF)
- Action plan and budget tracking (AHMED HAZZAF+HICHAM TAGHOUTI+FARAH MAGHNI)

¹ If needed, DAI will hire data entry clerks

Step 3: Fieldwork

- Assessment of current database (Subcontractor)
- Laying out the approach, action plan, and final budget. (Subcontractor + AHMED HAZZAF+HICHAM TAGHOUTI+FARAH MAGHNI)
- Development of the database + interface with ISO and Perinorm (AHMED HAZZAF+ Subcontracting Company)
- Establish relationship with Perinorm + general Follow up (SANI DAHER)
- Reporting (FARAH MAGHNI)

Activity 6 Development of document control tool

To be determined based on the scope of the new EU program with SNIMA.