

Technical Report

Development of the Functional Specifications of the Standards and Conformance Portal

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Prepared for

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Preface

This report is the result of the technical assistance provided by the Economic Modernization through Efficient Reforms and Governance Enhancement (EMERGE) Activity, under contract with the CARANA Corporation, Nathan Associates, Inc., and The Peoples Group (TRG) to the United States for International Development, Manila, Philippines (USAID/Philippines) (Contract No. AFP-I-00-03-00020-00 Delivery Order 800). The EMERGE Activity is intended to contribute towards the Government of the Republic of the Philippines (GRP) Medium Term Philippine Development Plan (MTPDP) and USAID/Philippines' Strategic Objective 2, "Investment Climate Less Constrained by Corruption and Poor Governance." The purpose of the activity is to provide technical assistance to support economic policy reforms that will cause sustainable economic growth and enhance the competitiveness of the Philippine economy by augmenting the efforts of Philippine pro-reform partners and stakeholders.

The Director of the Department of Trade and Industry (DTI) Bureau of Product Standards (BPS), Director Jesus Motoomull, requested EMERGE assistance by letter dated July 12, 2006, to establish a Standards and Conformance (S&C) Portal to help increase the compliance of the business community with the commodity standards and technical regulations of the Philippines and of the country's major trading partners. The task was undertaken in two phases:

- Phase 1: Specification of the Functional and System Design of the (S&C) Portal
- Phase 2: Development and Establishment of the S&C Portal

Mr. Oliver A. Malabanan, an information technology specialist, was contracted as the lead consultant for this task. This is his final report for Phase 1.

The views expressed and opinions contained in this report are those of the authors and are not necessarily those of USAID, the GRP, EMERGE or the latter's parent organizations.

FINAL REPORT

**Development of the Functional Specifications
of the Standards and Conformance Portal**

EMERGE Technical Assistance Phase I

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1.0 INTRODUCTION

1.1. Background of the Technical Assistance

The Director of the Bureau of Product Standards (BPS), Director Jesus Motoomull, requested the assistance of EMERGE in its pursuit of increasing the compliance of the business community with the standards and technical regulations of the Philippines as well as that of the country's major trading partners.

Philippine Exporters often face difficulties when introducing their products into a new market. Different countries impose regulations governing the technical requirements for products, which can be expensive for exporters to understand and comply with. Even with existing WTO agreements regarding Technical Barriers to Trade (TBT), TBTs still continue to exist and impose unnecessary and significant cost on producers and exporters. TBTs come in the form of technical regulations, standards and conformity assessment procedures being proposed by countries on particular products. TBT Notifications are published regularly through the WTO Secretariat to give chances to affected countries to comment before proposed regulations are finalized and implemented.

While compliance with standards is voluntary, this is not so for technical regulations. The latter are mandatory measures required by government to ensure that products do not adversely affect legitimate public policy concerns, such as the protection of human health and safety and the environment. An export product will be denied entry for non-compliance with technical regulations. The increasing use of technical regulations along with the successive reduction in tariffs and their impact on market access have resulted in TBTs becoming one of the major impediments to the international flow of goods.

Philippine exporters encounter a number of difficulties in complying with the standards and technical requirements of their export markets. First, there are no available national inventory of technical regulations, standards and conformity assessment procedures affecting exports. Oftentimes, queries remain unanswered due to one or more of the following reasons:

- (1) Information is not known to the agency receiving the query
- (2) Level of implementation at the national level itself is low
- (3) Regulation has not been updated in relation to related or referred standards as and when they are revised

Second, there is no mechanism for involving the business community in making comments on national and foreign notifications from the WTO about TBT. The TBT Agreement contains transparency provisions that seek to reduce discriminatory or trade restrictive measures at an early stage in the regulatory process, so that the Philippine industries are not faced with unnecessary obstacles to trade. Transparency in this context is closely linked with notification requirements. Thus, concerned stakeholders are urged to request copies of texts of the proposed measures, review and comment on those areas that may have an impact on international trade.

To assist Philippine exporters comply with the requirements of importing countries, it is essential that these stakeholders have extensive access to information about standards, both national as well as international, and various regulations relating to trade. Likewise, the BPS, as the National Standards Body of the Philippines and the National Notification Authority and Enquiry Point under the WTO TBT Agreement, needs to upgrade its existing IT equipment to disseminate information in order to fulfill its obligations and benefit from the TBT notification provisions.

The TA is expected to assist the Philippine exporters to enhance their wealth of information to be globally competitive and thus, reduce their business transaction cost associated with different requirements between trading partners in different countries.

There are two primary objectives of the TA. The first objective is to provide the Philippine business community, particularly exporters, with a seamless facility that provides them easy access to information on standards, technical regulations and conformity assessment requirements of the Philippines as well as the country's major trading partners. The business community's access to this information and their compliance with the requirements of their trading partners will facilitate trade, improve their market access and possibly reduce their business transaction costs.

The second objective is to enhance the capability of the National Technical Barriers to Trade Coordinating Committee (simply known as the National TBT Coordinating Committee) in providing policy direction for the effective implementation of the country's commitments to the WTO TBT Agreement and other bilateral/regional agreements. As part of the requirements of the Decision and Recommendations Adopted by the TBT Committee (G/TBT/1/Rev.8) under the WTO TBT Agreement, member countries should develop a National TBT Coordinating Committee Manual of Procedures following the guidelines set under G/TBT/1/Rev.8. The country has yet to comply with this requirement.

The BPS during the course of the Technical Assistance organized the S&C Portal Steering Committee to oversee the implementation of the TA program. The committee is composed of the following:

- (1) Bureau of Products and Standards (BPS) as Chair
- (2) Export Development Council (EDC)
- (3) Philippine Exporters Confederation, Inc. (PHILEXPORT)
- (4) Philippine Chamber of Commerce and Industry (PCCI)
- (5) Bureau of Exports Trade Promotion (BETP)
- (6) DTI- Management Information System
- (7) EMERGE

1.2. Objectives and Components of the Technical Assistance

Phase I of this Technical Assistance involves the specification of the functional and systems requirement of the Standards and Conformance (S&C) portal. This is a preparatory activity to the development and establishment of the S&C Portal, which has been planned for Phase II of the Technical Assistance.

Phase I Technical Assistance aims to:

- (1) To conceptualize and prepare the specifications and features of the portal
- (2) To establish the criteria for evaluating and selecting the firm/company which will develop the portal; and
- (3) To prepare the work plan and estimate the cost requirements of Phase 2 of the TA— Development and establishment of the S&C Portal.

In coming up with the functional and systems requirement, an assessment was first made on the current procedures and practices of the BPS in providing its services to the business community. Improvements on how to better address the business community's needs were then incorporated into the design of the portal.

The complementary agreement between EMERGE and ECA of the EU-TRTA Program led to the identification of a single supplier to develop the S&C Portal. As such, the identification of criteria, evaluation and selection of a developing firm was not anymore conducted. All other objectives have been met by the Technical Assistance and has been presented to and approved by BPS and the S&C Portal Steering Committee (see Appendix A, B).

1.3. Methodology

In order to achieve these objectives, a methodology was set in place in order to properly conceptualize and prepare the specifications and features of the portal. This method also identified the components that need to be undertaken to meet the objectives set for the TA. These are:

- (1) Perform gap analysis/study of the existing system to identify gaps/problems that need to be addressed. (See section 3.0, appendices D, E, F, G, H)
- (2) Based on the results of task (1) above, conceptualize and specify the functional and systems design of the S&C portal. Included in the functional and systems design of the portal are the hardware and software requirements (with cost estimates) that will make implementation of the portal possible. (See section 4.0, appendices O, P, Q, R)
- (3) Present the draft functional and system design of the portal to the S&C Portal Steering Committee for their comments and approval.
- (4) Identify all the necessary training modules needed in the project implementation (see appendix S)
- (5) Prepare the work plan and budget requirements for Phase II of the TA (e.g. cost estimates of hardware, software, database build up, and other related costs) (See appendices U, V, W, X, Y, Z, AA, BB, CC, DD)
- (6) Establish the selection criteria for evaluating the firm, which will develop portal.
- (7) Assist the S&C Portal Steering Committee in evaluating the proposals for the development and establishment of the portal.
- (8) Assist the S&C Portal Steering Committee in the selection and evaluation of the successful bidder
- (9) Coordinate with BPS, PhilExport, PCCI, EDC and DTI-MIS during the course of the implementation of this TA.

These activities are to be conducted through interviews and consultations with the Steering Committee through committee meetings. Regular workshops were held with the BPS Portal Working Group composed of representatives of the different Action Teams (AT) of the BPS, in order to elicit requirements and other information that will enable the proper identification of the features and functionality of the S&C Portal.

Aside from conducting interviews, several portals were visited as part of benchmark in order to justify features and functionality of the S&C Portal in its alignment to existing commercial portals. These were discussed and shown during the BPS Portal Working Group meetings and consultations with the BPS IT Officer and the S&C Portal Officer-in-Charge.

The complementary agreement of EMERGE and ECA has led to the removal of components (6), (7) and (8) above.

1.4. Major highlights of Phase I Technical Assistance

At the start of the Technical Assistance, EMERGE has observed that the idea of the BPS Staff about the S&C Portal is not aligned to what the portal is originally intended. Bordering on automation of business process inside BPS, expectations need to be immediately controlled and clarified. It was decided that the scope and limitation of the S&C Portal be communicated to the S&C Portal Working Group. Several Working Group meetings were conducted in order to explain and fully clarify the extent of the coverage of the portal and the demanded involvement of the different BPS Action Teams (AT) in the conduct of the TA.

Section 2.0 of this terminal report discusses the fundamental concepts of a portal that served as clarification to the extent of coverage of what a portal can do. **Section 3.0** discusses the Systems Appraisal made on BPS; **Section 4.0** discusses the identification of system features and functionalities of the S&C Portal

Aside from the activities involving the Systems Appraisal of BPS and the definition of the features and functionalities of the S&C Portal, during the course of Phase I TA, it came to the attention of EMERGE the existence of a similar assistance being extended by the EU through its Trade-Related Technical Assistance (TRTA) program. This assistance includes a component to develop the WTO TBT Notification Portal (TBT Portal), in which after review of its scope, shows that the entire portal is included in the S&C Portal. The Entidad Colaboradora Administracion (ECA) is managing this assistance.

Several options have been studied considering the benefit for both BPS and the elimination of possible duplication in technical assistance. A major activity was spent on defining the scope of work and assistance to be provided by each. Given that ECA has already finalized its TOR, Dir. Motoomull requested EMERGE to take on the portal's functionalities, which are not covered by ECA.

ECA also had contracted the services of SYSTEMA Computer Solutions Corp. to develop the export alert and notification system. SYSTEMA will use a product called Joomla. While Joomla is an open-source software, which meets all the requirements of the ECA-covered functionalities, it also provides a rich application framework for any customization that is required. To ensure technical consistency and compatibility of all the portal's functionalities to be provided separately by both TA's, a single supplier is deemed necessary. Thus, EMERGE, in coordination with the BPS, evaluated JOOMLA as a product, and the technical capability of SYSTEMA as a supplier for the development of the S&C Portal. Evaluation shows that both are favorable and decision for the single supplier has been finalized and approved for submission to USAID.

Section 5.0 discusses the complementation of TA between EMERGE and ECA

EMERGE also assisted the BPS prepare the proposal for the hardware requirements of the portal. The Export Development Council (EDC), through a letter to Dir. Motoomull, expressed funding support for the hardware component of the portal. Funding support will come from the Export Promotion Fund of the Bangko Sentral ng Pilipinas (BSP). **Section 6.0** discusses the proposed hardware configuration used for the BPS proposal to BSP.

Towards the end of the assistance and in preparation for Phase II, several activities were identified and with BPS not having enough manpower to dedicate and assign to perform these activities, BPS requested EMERGE to extend its assistance to include the hiring of additional staff. Several alternatives were studied as part of the cost reduction efforts for the TA. These includes the addition of four (4) more staff to handle the database and content migration instead of having them carried by the supplier.

In preparation for Phase II of technical assistance, the S&C Portal Working Group was briefed with the eminent activities that demands full cooperation and involvement of the different action teams. Preparations were facilitated by EMERGE and was supervised by BPS.

Section 7.0 discusses the work plan detailing preparations for Phase II TA.

2.0 PORTAL CONCEPTS

At the start of the technical assistance, it was necessary that an orientation about portals be given to the Portal Working Group. This ensures that expectations about the portal and the limitations of the TA are communicated to BPS. With the limited timeframe for the development of the S&C Portal, it was necessary for members of the Portal Working Group to understand the scope that will be feasible for implementation.

2.1. Portal Defined

A portal is an online facility that primarily delivers information being held by an organization as part of its information service to its stakeholders. Through online facilities, the organization can publish and organize information content. Using a different set of facilities, stakeholders can view, access and search through the organized and prepared information resources (see figure 2.1).

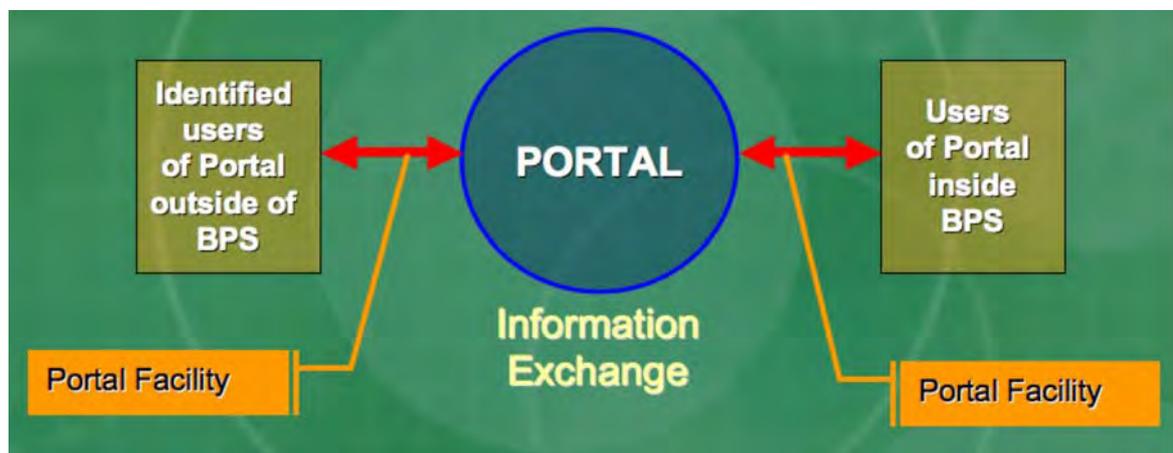


Figure 2.1 General Framework of a Portal

Traditional portals only allow a one-way exchange of information. For organizations to create and publish up-to-date and responsive information content, a two-way information exchange is necessary to elicit feedback as well as to communicate emerging concerns and demand for other information. Furthermore, with a two-way information exchange, the portal become a living organism that is continuously fed with increasing amount of data generating a wealth of information beneficial to the entire community which it was intended for.

Aside from information services and as part of promoting exchanges, today's portal allows transactions and other services typically offered by an organization through traditional modes of personal appearance, email and manual communications.

When organizations embark in a portal initiative, it is necessary that internal processing systems (typically automated information systems) are present that will enable the organization to prepare and organize information resources and respond to services engaged by stakeholders offered through the portal.

Some organizations still embark in a portal endeavor even with the absence of pre-requisite internal processing systems. This often results to the inclusion of the development of internal processing facilities together with the portal. Oftentimes, there is a need to control the scope in which internal processing facilities are developed especially given a limited development timeframe.

In the case of BPS, some limit into the inclusion of internal processing facilities must be established. Figure 2.2 shows the recommended limit of internal processing facilities to be included in the S&C Portal. With only five (5) months development timeframe, it can only be expected that some data management facilities is achievable. Even if the desired scenario is to have a fully integrated and automated BPS, which will allow BPS to react accordingly to the demands of its stakeholders, the technical assistance can only do as much as data management and leave the development and improvement of these systems for future technical assistance.

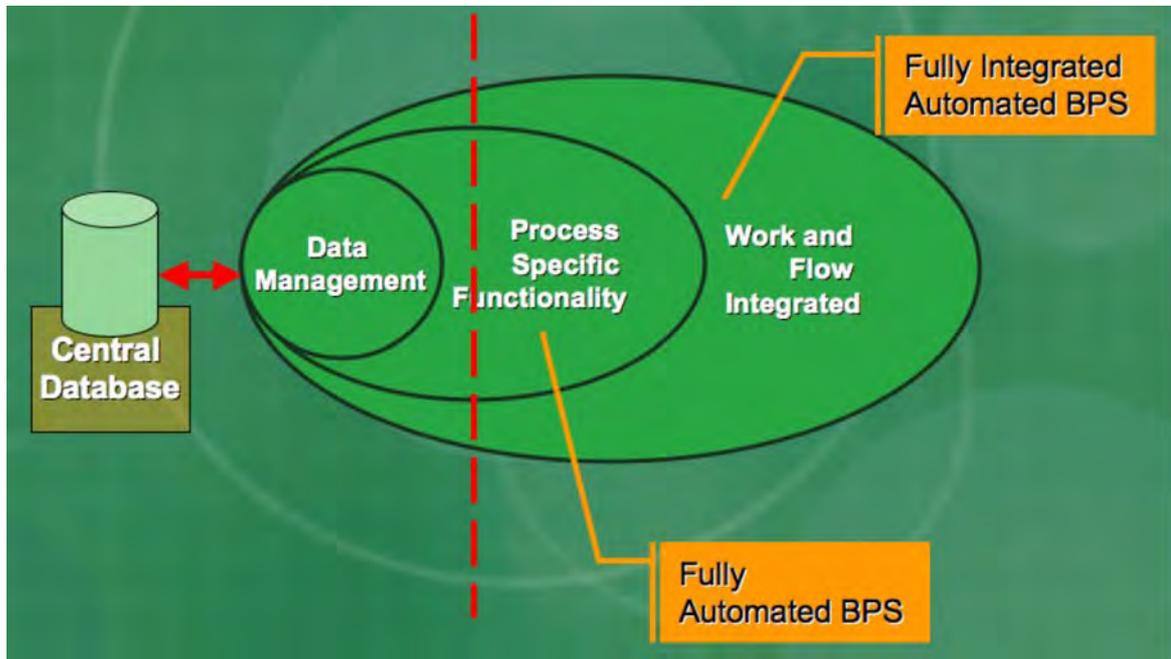


Figure 2.2 Internal Processing System inclusion limit proposed for the BPS

With these limitations, internal processing of information and services will be done manually but the final results of these processing can be recorded through tools provided in the portal to update databases or publish final and approved information content.

2.2. Portal content and its role in sustaining the life of the portal

The bloodline that sustains the life of the Portal is the content being published in the portal. The cycle of publication, assessment and creation of content becomes part of the organization's internal culture. It is a typical scenario in any portal endeavor that the information demands of the organization's stakeholders is far beyond what the organization maintains and holds.

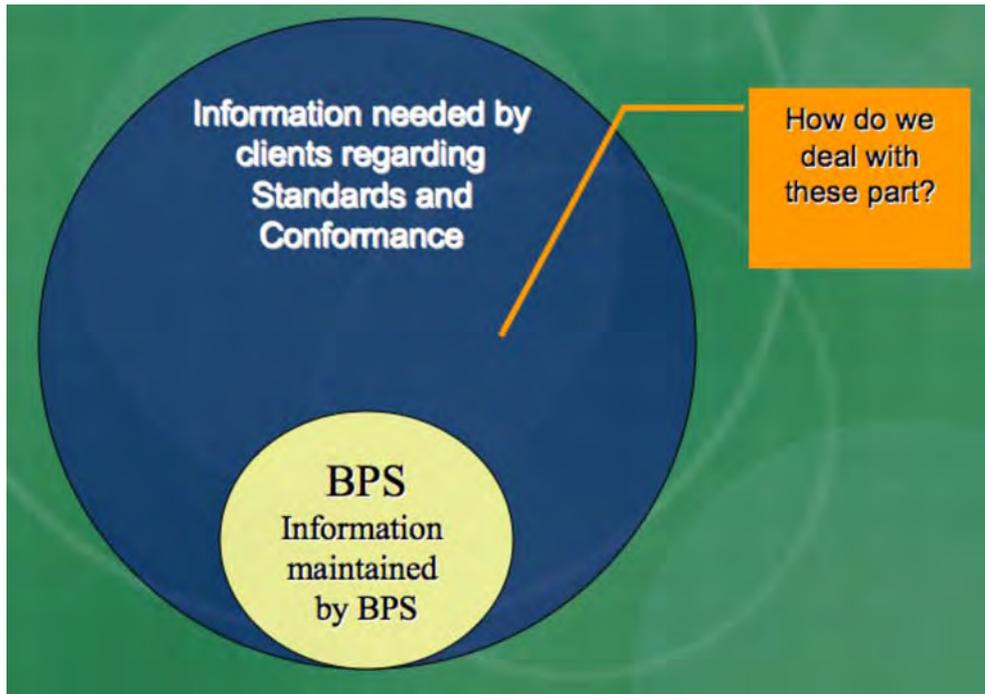


Figure 2.3 Initial analysis of the situation of content demanded by Stakeholders and content held by BPS

In the case of BPS, initial analysis of the information demanded by stakeholders shows that it is bigger than what BPS has collected and currently holding (see Figure 2.3). This merits a re-assessment of the organization’s data collection systems and mobilization of key personnel to gather and organize needed data resources. As the portal continuously elicit more information demands from stakeholders, the organization hosting the portal is required to take an active role of identifying current and future demands for information and content and immediately harvest, create and publish information resources. Without incorporating this active culture, the portal will always take a passive role and will sooner be non-responsive to stakeholders’ information needs. And typically, this results to the death of a portal.

Successful portal implementations show that organizations that host these portals transform themselves into knowledge and information processors as compared to traditional data processors. A characteristic of a knowledge and information-based organization is its desire to analyze collected information to generate a new wealth of knowledge for both the organization and its stakeholders. This desire is transformed to a re-engineered organization that does not only focus on its ability to process but also in the ability of all its members to generate and re-use information and knowledge, all aimed to provide better information services.

2.3. General Description of the S&C Portal

Prior to the approval of the TA, the BPS has articulated a general description of its vision for the S&C Portal. It included the list of systems and applications that the BPS has identified to be necessary in meeting the objectives set for the S&C Portal. During the assistance, these systems and applications were analyzed and implications to BPS have been identified. Part of the systems appraisal conducted is the assessment of BPS capability and preparedness to embark in a portal initiative like the S&C portal.

The S&C Portal is a web-based facility, available to the public 24x7 (24 hours a day and 7 days a week). It is envisioned to be a seamless/unified one-stop information center for standards and conformance activities in the Philippines and other WTO member countries. The service can supply online information on standards, technical regulations for particular products in specific markets, alert notices on the impending changes in the Philippines, foreign and international regulations and conformity assessment rules, source accredited testing laboratories and inspection companies and, mechanism for commentary on proposed technical regulations issued by WTO member countries.

The portal will highlight the services, efforts and activities on standards and conformance in the Philippines. Different sections will be created to organize information resources such as news releases, calendar of events, announcements, programs, online resources, FAQs, online databases, strategic alliances (local and foreign linkages), online transactional applications, sitemap, etc.

In achieving these objectives, the portal includes the following systems:

1. Content Management System
2. Payment Gateway
3. Search Mechanism
4. E-mail newsletter
5. Message Board
6. Web store
7. Catalogue Online
8. Standards & Export Alert Service
9. Online Databases
10. User Profiling/Monitoring tool

The portal will run different database applications supported by database management system (DBMS) designed to manage the databases and run operations on data depending by requests of users. These applications should be able to manage and query collection of records, adding records, retrieval, sorting, deleting and indexing. These databases include:

1. Catalogue of Philippine National Standards
2. List of Philippine National Standards declared mandatory and relative implementing guidelines
3. Directory of certified companies and/or products/services
 - o PS license holders
 - o Import Commodity Clearance holders
 - o ISO 9000 certified companies
 - o ISO 14000 certified companies
4. Directory of accredited laboratories
5. Registry of accredited Conformity Assessment Bodies
6. Registry of TBT notifications (proposed standards/technical regulations/standards conformity procedures issued by the Philippines and other WTO member countries)
7. Contact points on standards and conformance (concerned Philippine government regulatory agencies)

During the course of the assistance, other systems were identified as important to meeting the objectives of the S&C Portal. These include the Document Management System, the Library System and other facilities targeted for the use of the members of the National TBT Coordinating Committee and its Technical Committees

3.0 SYSTEMS APPRAISAL

S&C Portal is about the use of Information Technology (IT) in the effort to increase compliance of the business community with the standards and technical regulations of the Philippines as well as that of the country's major trading partners. IT plays a major role in the achievement of this objective by providing means for access and distribution of information about Standards and Conformance as well as providing a venue where the business community could participate in the standards development and conformance activities conducted by the Bureau of Product Standards (BPS).

The S&C Portal was envisioned to be a one-stop shop for information related to standards and conformance. The business community gets access to a collection of information about standards and conformance through a single online facility. The recommended portal strategy is one that goes beyond information delivery but also includes providing facilities for clients to reach BPS and vice-versa using a convenient medium like the Internet. This does not only foster open communication, but allows clients to get direct access to BPS information services and participate in various BPS programs regardless of existing geographical conditions. Technological advancement includes the provision of facilities for the proper management of data resources and the distribution of these resources to the public through broadcast and targeted active modes (pushing information to the public through alert systems using email).

Inherently, the Portal as a technological solution targets the improvement of the quality of assistance (translated to information services) given to the business community. Improvement in quality translates to providing adequate and up-to-date information to clients. This denotes proper collection and selection of information resources, organizing them in a manner that could easily be explored and used. This responsibility lies in the hands of BPS and technology is seen as a medium in which this could be possibly carried out by BPS.

The relationships of the different divisions in BPS and their contribution to the overall service required of the bureau are remarkably clear and properly documented in the Quality Management Systems (QMS) documents. This is a good starting point in the integration of technology in an organization. The requirement for improvement in the quality of information assistance through a virtual environment such as a Portal demands a strengthened relationship among the different divisions through stronger data and document sharing and properly captured and facilitated information exchange. Aside from enabling divisions to capture, collect, select and organize resources, technology needs to enable these collected resources and recorded exchanges to be easily shared and accessed by other members of BPS. This creates a central pool of resources and knowledge (possible when communication exchanges are also captured) that each member of BPS could use in the improvement of their respective services.

In the gathering of requirements conducted with the stakeholders, their needs could be characterized into three areas:

- a. Access to relevant and up-to-date information related to standards & conformance and how to go about compliance to existing regulations both local and foreign markets
- b. Active mechanism to inform the business community of impending regulations that will affect product entry to foreign markets. This includes concerns in the understanding of these regulations.
- c. Organized and institutional mechanisms that will integrate and consider the concerns of the business community regarding TBTs.

In the assessment made with BPS, attention was focused on areas that hinder BPS to deliver services demanded by its stakeholders as reflected by the above-mentioned three areas characterizing stakeholders' requirements. The establishment and strengthening of the National TBT Coordinating Committee not only provides an institutional and organized mechanism to address the concerns on TBTs, but also ensures that any TBTs are acted upon with representation of different sectors affected by it.

3.1. The current portal of BPS

BPS is currently using a portal that allows the general public to access information that BPS considers necessary for public consumption. The experience with the current portal serves as a good base point to realize the gaps present in the pursuit of any portal development initiative like that of the S&C Portal.

In a discussion with the Portal Working Group, it was revealed that even BPS itself is not using its own portal for getting information and is unaware whether contents that were submitted for publication were indeed published. During the conduct of the assessment, the PNS catalog was never updated nor was there a report submitted to check and update such content. According to the BPS IT Officer, updates to the content of the portal are seldom received.

The current BPS portal is managed and administered by the BPS IT Officer. None of the action teams have access to the portal. Content and information publication and update requires going through a series of steps of approval and revisions, ending with the BPS IT Officer, that manually convert, translate, encode and update necessary resources to publish the content. This situation does not only result to delays in the production of content to its publication but also did not promote a sense of ownership and portal content responsibility among some of the BPS personnel. With responsibility ending when contents are approved and submitted to the BPS IT Officer, it is often the case that AT's do not anymore check if contents indeed were published. The exclusion of the AT's as main users of the portal has reduced the sense of publication responsibility and sensitivity of the state of the content being published in the portal. This has isolated the portal pushing the domain of responsibility for it as exclusive only to the BPS IT Officer.

The domain of responsibility of a portal is all the members of the organization. Without this strong sense of responsibility for the content and the status of the portal by all the members of the organization, the portal becomes slowly updated and containing expired content relevance.

The current BPS portal could be characterized as simply an information dissemination medium. Participation of portal users is limited to the use of email to communicate any concern, feedback or contribution to BPS and its activities.

3.2.Current Alert Mechanism

The email system is primarily the main alert system used by BPS. Sufficient for its purpose, difficulties happen in the management and monitoring of this medium. The use of this method typically involves manually creating an alert email, manually identifying target of the alert and attaching relevant documents necessitating alert.

This method is highly dependent on the availability of a BPS staff to review incoming TBTs, and its absence results to the alerts not to be sent. With a short duration for comments, efficient and fast alert method is needed where alerts could be sent to affected (or subscribed) individuals, companies or associations. With the absence of a better record management facilities, monitoring of alerts and comments received are not efficient and effective.

3.3.Need for Data Integration

One of the drivers that would address information requirements of the BPS' stakeholders is a central and integrated database holding data items used to generate useful information. This database must be an integrated collection of relevant data maintained by BPS' various Action Teams (AT) centrally stored and made available not only for the stakeholders but also to support each AT's operations. Currently, BPS has no central-integrated collection of data stored in an electronic database. Each AT is maintaining a "database" either on electronic flat files like Microsoft Excel and Microsoft Word, on Microsoft Access and in a database managed by an AT-specific Information System. These results to information to be isolated to each other and when relationships between information is needed, additional processing is necessary to integrate existing data collections. Due to the prevailing data management silos, data standards are not present resulting to difficulties and delays due to additional processing when data from AT's need to be integrated.

3.4. Technological Systems on the Management of Data

Equally important to the distribution of information is the ability of BPS to prepare these sets of information. Achieving this objective requires an internal grounding of processes and technological systems that facilitate the collection, recording and organization of data, processing of contributions and transactions; and transforming them into useful data adding to the already collected information. The information technology penetration in BPS is currently limited to the use of Office Automation tools like Microsoft Word and Excel for the

management of its data and information. With the exception of AT5 (the division concerned with Certifications), Information Systems are not in place in BPS. Communication and exchanges are done through email and has form part of the working culture in BPS.

With a QMS in place, the lack of information systems is augmented by a set of manual processes, properly documented and disseminated across the organization for implementation; a set of physical filing structures and organized computer folders. These manual processes together with built forms facilitate activities and data recording activities in BPS.

Technological Systems are only part of the solution in place concerning management of data. Responsibility and culture of data collection and management form part and parcel of this solution. Data Management responsibility is one of the key items to settle when embarking on an initiative like the S&C Portal. Divisions keep data that they need for them to perform their function. These data silos work and ensure that each AT's can work at their own pace and independence. By the nature of this records and data management practice, formed silos often results to difficulties in immediate sharing, tracking and processing for analysis and reporting requirements. Aside from these, the ownership of data (often includes the management and maintenance of that data) becomes gray and thrown to other divisions to handle. With the S&C Portal initiative, these silos must be broken and work on the notion of a common corporate data for BPS. Benefits of this include fast extraction of knowledge through reports.

3.5.Information Services and an Active Bureau

In order to meet the requirements of the business community, BPS has to transform itself into an active Bureau. Looking at the entire collection of data required for an active Bureau, it is unfortunate that data about the business community, which the portal will serve, is limited if not known to BPS. Collected information about companies and their products are restricted to those who have transacted business with BPS (either through certification applications, inquires or other activities).

A very important activity of an organization is the active collection of references and other information for the use of the entire organization. Analyzing the potential of each Division in this conduct, assessment attention was captured by the Information Services Division of BPS. The Division's services and activities center on library services, standards data centre (although analysis shows that the nature is the same as library services), sales, and ordering of standards. The wealth of information needed by the stakeholders depends of the vastness and proper organization of external and internal data sets collected by BPS. With the other divisions as business transactional units of BPS, the Information Services Division is seen as a potential business service unit to the entire BPS by being primary division leading this data collection and organization effort.

It has been duly noted during the conduct of the assessment that divisional silos may have not been intended and its existence is not seen as a regular state of business but rather an effect of the insufficiency of technological tools to achieve a unified and active bureau. Commend to BPS, is its ability to augment this insufficiency with manual process and efforts to near reach this organizational characteristics. Bureau unification has been a noted term throughout the

assessment period and could be seen as a conscious recognition by the Bureau and its staff of the need to unify efforts in order to achieve higher efficiency and effectiveness in the delivery of its services.

It is unfortunate though that this initiative is primarily a technological solution addressing the concern of the business community (an external requirement) as it could have been primarily oriented towards a technological solution to address internal processing concerns resulting to beneficial effects to the business community. In this regard, we are seeing efforts to technologically address the concern of the business community and internally, limited technological catching up scenario because of development limitations accompanying this technical assistance.

Future technical assistance maybe possible to complete technological assistance on internal business operations but the impending portal initiative, efforts to address the silos could already be started. With portal features intended to partly support internal business operations, preparations to move towards a unified organization assisted by technology could already be initiated. Preparations may be needed on the following areas:

- Orienting the BPS staff on the benefits of organizational unification through a common technological and integrated data platform
- Valuing and proper realignment of records management responsibility (with indexing) of each division as a key requisite towards rich information usage across the organization
- Movement towards data integration rather than data silos

BPS is an organization where quality is part of its organizational working culture. The presence of the QMR is a positive sign of openness to process adjustments that may be necessary to improve the quality of services. Portal implementation will require some task and process alignment due to the added data management tasks accompanying the technology. It has been highly noted during the assessment period that process alignment is an open initiative and corresponding data management additions is welcome as long as it does not become too much of an inconvenience and if benefits reaped in doing so will upgrade the quality of work and services that staff members provide clients.

Taking note of this acceptance to possible process alignments when the Portal is in place, keen consideration to the design of the portal is its ability to produce direct benefits to internal users. This could be made possible if internal users themselves could use the portal in support of their conduct of business. Taking into consideration the limited functionality that could be provided, keen selection on the internal functionality has to be made to add beneficial features for internal users, and this serves to be a good criterion for prioritizing features for both internal and external users.

3.6.Lack of Information System requisites

This situation is typical to an organization embarking in a technological public information system like a Portal without an internal set of technological systems in place that facilitates the gathering, creation, collection and organization of resources as well as processing information collected via the Portal. Ideally, a Portal is built when pre-requisite information

systems (automated systems) are in place that assists users in the creation & collection, organization and maintenance of their respective data (or content). What the portal does is to interact with these systems to get information and deliver to external users. Furthermore, external users' transactional outcomes are accepted by the portal and send to the appropriate information system for automatic of human-led processing. Unfortunately, these pre-requisite Information Systems are not present in BPS.

True enough that any initiative just like this should have an end in mind the clients as beneficiaries; but true as well is that facilities benefiting clients only work if facilities are in place for internal users to prepare and process services. This is why internal computing requirements are typically addressed first before any external information requirements are addressed. In the scenario of the S&C Portal, much concern has been noted whether the limited time of the assistance could address internal computing requirements required of the demanded features in the Portal. It will be most likely that some of the demanded features will be relaxed in order to balance the computing support that can be given to internal users due to technical assistance constraints.

Any technological initiative that is not grounded or have been checked against an established Information Systems Plan, not following an established roadmap for the implementation of proper system requisites will typically end up with this situation of the S&C Portal. Technological leadership is demanded such that technology initiatives are incremental, properly planned preventing information system silos resulting to difficulties should future organizational systems integration is demanded. With this initiative already taking its course, a reverse roadmap is going to take place, with future initiatives eventually using the S&C portal as a core platform for the development of other information systems (to be viewed as extensions to the S&C portal). It is best that the organization starts to look and review its IS Plan and focus on initiatives and assistance that will enable the completion of the identified internal Information Systems portfolio. Future development efforts therefore will take the form of extending the features of the S&C Portal, building up on its already developed core functionality.

In order to address the gap and at the same time still achieve the near ideal scenario for the S&C Portal, portal development efforts will have to be oriented towards inclusion of functionalities that will enable at minimum level the creation, collection, organization and maintenance of AT data but taking into consideration that this is an opportunity for an effort towards an integrated organizational database.

3.7.Manpower

Looking at the possible solutions to the different technological gaps and methods existing in BPS, any solution proposed and designed will not be maximized should BPS not addressed the ongoing lack of enough personnel to handle internal operations of BPS.

The establishment of the S&C Portal will result to a lot of content, data and information maintenance on BPS. Key to the life of the portal is the maintenance of its content, data and information. Even with the presence of facilities, these facilities are dependent on the availability of personnel that will use and perform these maintenance functions.

BPS is known to be a flat and adapting organization, with the eminent need for manpower to maintain the life of the portal, Dir. Motoomull has expressed openness to this consequential demand of the portal to BPS and has briefed his personnel about the need for reorganization and reengineering of some of its daily process and operations to meet this challenge.

For the different partial appraisal documents that lead to the final Systems Appraisal of BPS, see appendix D, E, F, G, and H

4.0 IDENTIFICATION OF SYSTEMS FEATURES and FUNCTIONALITIES

Important to the identification of the system features and functionalities of the S&C Portal is the development of a framework that will determine key activities that the portal needs to support. With this framework, specific facilities in the S&C Portal could be determined, understood and justified. The framework used for the identification of the portal's features and functionalities are founded in the objectives set for the S&C Portal.

The portal is a living organism sustained only by providing it with information that elicits involvement and production of new and more relevant information. If production of new and relevant information is not sustained, the life of the portal gets shorter and shorter, resulting to decreased involvement the community it intends to be participative and eventually ends its importance to the stakeholders it was intended to serve. In this manner, the framework identified for the S&C Portal is that that promotes AWARENESS, REACTION AND CONTRIBUTION and KNOWLEDGE CREATION (see figure 4.1).

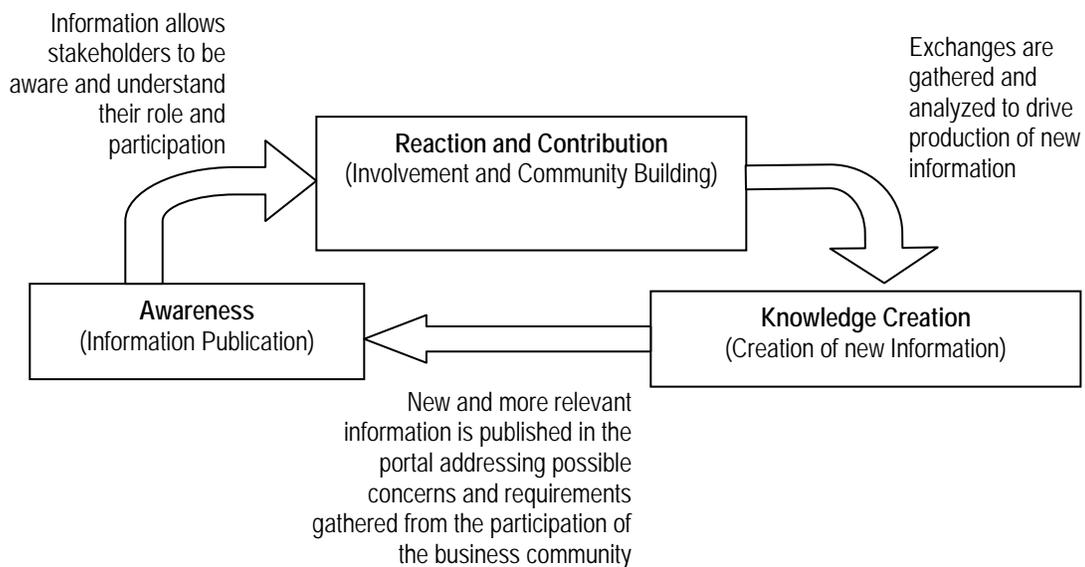


Figure 4.1 Guiding Framework for the determination of features and functionality for the S&C Portal

In order to keep the business community aware of different facets related to standards and conformance, facilities should be in place for the proper publication of information and data. To elicit the business community's participation, it is important that aside from awareness, enough facilities are provided for them to react and involve themselves in the standards and compliance efforts. The establishment of community-building facilities that allows involvement of the business community as well as other agencies maximizes the gathering

and generation of new information from all sectors involved in the standards and compliance endeavor.

None of these participative and involvement eliciting features would be beneficial should BPS not be able to transform information generated through all these exchanges to new and updated information in the portal. This necessitates that enough tools and facilities are available to BPS in order to update and create new information.

The complete list of the system features and functionalities of the S&C Portal could be found in Attachment I of this technical report.

4.1. Delimiting Factors in the Identification of Features and Functionalities of the S&C Portal

One of the factors that have always been considered in the drafting of system features and functionalities of the S&C Portal is the limited timeframe allotted for its development. Several meetings with BPS have been conducted to regulate the number and extent of these features so that it will fit the development timeframe of five (5) months.

Considering the BPS personnel that will eventually use the S&C Portal, features and functionalities have been leveled to a simple and straightforward mode possible. EMERGE was cautious in bringing in highly automated features where manual process may prove to be faster and more adaptive to such a small organization like BPS.

4.2. Awareness

Basic to the increasing compliance effort is to inform the business community about what standards and technical regulations are in effect and will be in effect. In order for the business community to participate and comply with existing standards and regulations of the country and its trading partners, BPS must target making its stakeholders aware of these standards and regulations, as well as the implications of not complying with these regulations. Making them aware of how to go about conforming to these standards, and assisting them in their conformance to these standards and technical regulations is an important activity that BPS needs to take an active role on. In order to achieve this, BPS needs to involve other bodies outside of BPS in the generation of a wealth of information to assist the business community.

Important to the development of features and functionalities of the S&C Portal that promotes awareness is the consideration of the following:

- a. Push and Pull of Information
- b. Organization of Content
- c. Searching and the role of a Multiple Indexing System
- d. Database Relationships

4.2.1 Push and Pull of Information

BPS has an existing portal where important information is being published. Analysis of the current BPS Portal shows that information technology is used to allow its stakeholders to ‘pull’ information from BPS. This scenario forces stakeholders to take the active role of harvesting information from BPS that concerning their products and its compliance to existing standards and regulations. Maximizing technological advancements merits that aside from allowing stakeholders ‘pull’ information, BPS also takes the active role in ‘pushing’ important information to stakeholders. Pushing information to stakeholders implies that only specific information of interest to the stakeholders is pushed to them. Otherwise, the bombardment of too much information may prove to be more disadvantageous than without it. This requires that BPS capture stakeholders profile and the areas of information they require to be pushed to them.

Part of the facility integrated into the portal that pushes information to stakeholders is the Standards and TBT Alert Systems and the Newsletter Alert facilities.

4.2.2 Organization of Content

To assist stakeholders in pulling information from the portal, the organization of the content is important. Aside from the usual organization of content based on the operating divisions (or Action Teams) of BPS (e.g. Standards Development, WTO Enquiry Point, Certification, etc.), two other organization schemes were identified. These are organization of content based on product and based on the roles stakeholders play.

Appendix O highlights the initially proposed structure of the S&C Portal.

A single access point to the different databases was identified to promote a one-stop shop facility for searching for structured information such as those in the database. A Library and Information Center section has been identified to contain not only databases but also catalogs of Philippine National Standards and other references helpful to stakeholders (e.g. HS and ICS Concordance reference).

With facilities provided for BPS to reorganize content, the agency is given the flexibility to re-adopt the S&C Portal to suit the searching and information crawling behavior of its stakeholders.

4.2.3 Searching and the role of a Multiple Indexing System

In aid of the different roles and intentions of stakeholders in harvesting information from the portal, a multiple indexing system is identified to provide a way for dimensions of content published in the portal to be searched. Similar to the multi-indexing system used in a typical library, content in the portal (aside from indexing based on type of audience) will be tagged with index values representing the context of the content.

Index identified for all the content published in the portal includes:

- a. Country
- b. Region (Philippine Regions)
- c. Industry
- d. ICS and HS (Product)
- e. Philippine National Standard
- f. Audience Target
- g. Keywords
- h. Category
- i. Distribution Type (Public, Limited to BPS, Limited to selected users/group of users)
- j. Type of Content

4.2.4 Harmonized System (HS) and International Classification for Standards (ICS) Concordance

Acknowledging the familiarity of stakeholders to the Harmonized System (HS) Classification scheme, the portal aside from using the International Classification for Standards (ICS) scheme will include an HS-ICS Concordance Matrix which will power the ability of the portal to find resources whether coming from an ICS or HS perspective. Even purposively as a look-up matrix, the formation of the HS-ICS Concordance matrix is not only beneficial to the S&C Portal but also to other agencies who will require this concordance. As such, the portal also delivers a reference look-up facility for this purpose.

4.2.5 Database Relationships

The database of the S&C portal plays an important role in the delivery of information being maintained by BPS to its stakeholders. Analysis of the different databases in BPS shows that these needs to be integrated into a single repository in order to provide the stakeholders with a richer set of information. With relationships between databases established, stakeholders are given the benefit of cross-searching information between databases.

Among the benefits of this database relationships, stakeholders can now see what related foreign standards and regulations exists related to a particular Philippine National Standard, furthermore stakeholders can also look at accredited laboratories and laboratories under the ASEAN MRA that tests products covered by a particular Philippine National Standard. Another example of the benefit of this database relationship is the ability of stakeholders to see international standards either similar or equivalent to a Philippine National Standard.

In order to give these benefits, EMERGE assisted BPS in uncovering the different relationships of their individual databases. The list of databases and the proposed relationship with other databases are documented in attachment III of this technical report.

4.2.6 Facilities identified that promotes Awareness

Among the list of facilities included in the S&C Portal, the following systems promotes awareness:

- a. Content Publication
 - o News and Announcements
 - o Article Publication
 - o FAQs
- b. Online Database
- c. Newsletter and Newsletter Alert
- d. Standards and TBT Alert Facility
- e. User and Product Profiling
- f. Calendar of Activities
- g. Web Store

4.2.7 Web Store

In the context of trade facilitation, the sale of Philippine National Standards online aims to reduce the cost of access of the business community to existing standards being imposed in the Philippines. With facilities to electronically pay and get access to an electronic version of the Philippine National Standards, companies don't need to spend cost in going to Manila just to buy standards.

The path to maximize full benefit of eCommerce is still a long way. Currently due to restrictions imposed by the COA of having Landbank as the only financial repository of any government agency, ePayment can only be negotiated and implemented using Landbank's ePayment Gateway. Landbank's ePayment gateway at this stage can only accommodate peso transactions as well as limited to clients having a Landbank account. This does not permit foreign transactions to be conducted online.

Even with the above-mentioned restrictions, the implementation of the Web Store is still a worthwhile endeavor to take. Future developments in Landbank with regards to its connection to other banks and other payment modes (like credit card) will soon open doors to maximized implementation of eCommerce and further contribute to trade facilitation.

4.3. Reaction and Contribution

Business and industries even though the primary beneficiary of this initiative is part of a two-way relationship where their contribution is critical to increasing the collection of information, translated to assistance services to the entire community. These contributions may be in the form of contacts, links and references, feedback, comments, documents, assistance information for other companies, among others.

BPS acknowledges the importance of cooperation of the business community with its efforts in achieving the mutual goal concerning standards and conformance. Community driven efforts could be seen through the continuous updating and involvement of the business

community of the activities of the BPS through newsletters and projects. In support to this existing effort, the S&C Portal should not just be an information gateway but also a community building medium where the business community and BPS embarks on a co-beneficial relationship to assist the entire country achieve conformance and product entry to major trading partner countries. Technology paves way to make this relationship a reality by providing technology-assisted means for interaction and information exchange.

It is important that awareness features are properly used and populated with relevant information to elicit stakeholder participation.

4.3.1. Facilities identified that promotes Reaction and Contribution

Among the list of facilities included in the S&C Portal, the following systems promotes reaction and contribution:

- a. Alert Commenting Facility
- b. Content commenting and Valuation
- c. Message Forums
- d. Online Complaints and Inquiry Center

4.3.2. Alert and Commenting Facility

Alerts in the portal push important information to the stakeholders. Aside from this facility, the portal provides for a way for stakeholders to give their reaction and comments to either standards or TBT notifications. It is important that these concerns are considered before any regulations are finalized. This online commenting facility captures stakeholders' point of view and concerns, which allows BPS and its network of other agencies and experts to make necessary consideration to any proposed regulation or position to foreign TBTs.

4.3.3. Content Commenting and Valuation

Content and feedback is necessary for the continuous improvement and generation of updated, more relevant and responsive information publication. The S&C Portal provides a venue for stakeholders to valuate and comment existing content. With BPS capable of capturing this important and valuable feedback, it can objectively adjust and configure the portal to meet these information demands.

4.3.4. Message Forums

A community-building feature that will be incorporated in the portal is the Standards and Conformance Forum (or message board). Just like any forum, the S&C Forum houses a number of forum subjects particularly related to standards and conformance. In a forum, members of the community exchange ideas, commentary, questions and answers, and suggestions. This promotes an open communication regarding various concerns of the members of the business community. Following the experience of the GOV.PH

(<http://www.gov.ph>) forum, a rich vault of information about how to go about living in the Philippines. The forum becomes a bank of answers to the dozens of questions about living in the Philippines, from law clarifications to setting up a business, even voices to popular political and business issues in the Philippines. The same community energy is aimed with the S&C Portal. Not only that the forum opens voices to different members of the business community, it also becomes a good source of data for BPS in their pursuit for delivering better, up-to-date and responsive information service to its stakeholders.

4.3.5. Online Complaints and Inquiry Center

The portal will not be able to meet all the concerns and answer all the questions of the stakeholders. In order to capture systematically specific concerns and inquiries of stakeholders, an online complaints and inquiry center has been identified that will also allow BPS to manage the processing and status of any complaint and inquires of its stakeholders.

In the pursuit of better service to its stakeholders, it is important that BPS not only capture these concerns but also manage the process of addressing these concerns by being able to route to appropriate agency personnel (or partner agencies) and keep track of solutions and actions taken by the Bureau.

As an integral part of the portal, unlike the usual email method to capture, handle and address concerns and inquiries, the facility provides for a more systematic way to capture, monitor, and keep track of generated information and knowledge (that may be relevant to the entire community) from these kinds of transactions.

4.4. Knowledge Creation

It is equally important to providing stakeholders with information and allowing them to react, participate and contribute if the ability of BPS to generate new content and information as a response to the inevitable increase in demands for information.

A new wealth of information and stakeholder requirements is expected to be generated through the portal. Facilities that allow stakeholders to be informed, react, contribute and exchange information with BPS and other members of the community are captured in the portal and serves as reference for the generation of new information.

BPS, aside from being a participant, is a builder of this community and is responsible for initiating exchanges, sustains and manages the exchanges in the community, translating these exchanges to useful addition to the existing database and information collection. The transformation of exchanges between BPS and its stakeholders as well as the generated exchanges through community building features is an important activity that BPS needs to take in order to supply the portal with updated and more responsive content.

At this point, no existing division has been identified to potentially manage this community and be responsible for sustaining and transforming exchanges to useful database additions. Aside from these, a community seed building strategy must be setup that will serve as a catalyst whose exchanges itself invites participation from others, eventually growing into a wide participated community.

4.4.1. Facilities identified that promotes creation of new Information

Among the list of facilities included in the S&C Portal, the following back-end systems promote the creation of new information and publication in the portal:

- a. Content Management System
- b. Document Management System
- c. Forums Management
- d. Database Management

These systems are back-end facilities intended to support BPS in its pursuit of generating relevant information services to its stakeholders.

4.4.2. Content Management System and the Document Management System

The content management system offers facilities for BPS to create rich content and able to organize the portal to suit stakeholders requirements. Unlike the current BPS portal, the S&C Portal's CMS enables each Action Teams (AT) to take a more participative role in content production, monitoring and maintenance by allowing them access to content publication facilities.

Integrated with (DMS), action teams can create new content and documents in the DMS. With the DMS features of monitoring creation, edition and approval process, BPS content can be controlled and officially approved before its publication in the CMS.

One of the benefits that the CMS and DMS provide BPS is its ability to have access to any of its resources via the Internet. This does not only promote the ability of BPS to have information in its fingertips anywhere its personnel may be but also allows them to quickly share resources to any members of the organization.

4.4.3. Database Management

In order for BPS to maintain the quality and reliability of its data in the S&C Portal, facilities to manage databases and records are also provided in the portal. Through forms, records are maintained. This mode is a new mode for BPS. Although training can enable BPS personnel to the use of this mode of records management, it is important that the supplier carefully designs these forms not only to ensure reliability of data but also of ease of use of BPS personnel.

The benefit of having an integrated database is also the ease of generation of reports. The portal has included facilities for the BPS IT Officer to design and generate reports.

4.4.4. Forums Management

The success of this Forum lies in the moderation and monitoring by identified groups of people. Forums tend to be very chaotic and disorganized should there be lack of moderation and monitoring of exchanges. The inability of the forum to be organized and to answer and immediately reply to posted concerns and questions turns away community members for the basic reason that the forum is unable to assist in the quest for answers by the member. It cannot be expected that community members be actively answering questions posted in forums. It takes a group of people hosting the forum to actively answer questions posted in forums igniting others to also contribute. This also entails the extraction of exchanges in the forum and transforming them to useful knowledge bank (e.g. FAQ's).

The portal included facilities primarily aimed to effectively moderate community exchanges.

4.5. Support for the National TBT Coordinating Committee

The S&C Portal opens doors to the possible cooperation activities of the to-be established National TBT Coordinating Committee composed of other government agencies, industry associations, expert communities, the business and academic community. In order to facilitate these activities, the portal provides them access to the Document Management System, forum and shared calendar facilities.

This method is similar to facilities offered by ISO to its network of members and partners. Members of the committee is given facilities where they could look at existing materials and documents, discuss with other members, create new documents, comment on efforts already been made by the committee he/she belongs. With integration of the portal to the BPS mailing system, distribution of new information to affected committee members could actively be done.

Even if intended for the use of the TBTCOM, the same feature set was intended for the use of Technical Committees of the Standards Development Division and committees formed by the Product Certification group in the conduct of their respective mandates of developing standards and implementing guidelines for these standards.

5.0 EMERGE-ECA COMPLEMENTATION

5.1. The need for Complementation

During the course of the Technical Assistance, it came to the attention of EMERGE the existence of a similar assistance from the European Union (EU). BPS has engaged the assistance of the EU through its Trade-Related Technical Assistance (TRTA) program. This assistance to BPS, being managed by the Entidad Colaboradora Administracion (ECA) included a component for the development of a WTO-TBT Notification Portal, which is a part of the EMERGE's technical assistance for the development of the Standards and Conformance Portal (S&C Portal).

Even if the target scope of the WTO-TBT Notification Portal is limited to WTO and TBT Notifications, the major systems included in its portal are the same to that of the S&C Portal (see table 5.1). Technically, the overlap functionalities form part of the core functionalities of the S&C Portal. In a business perspective point of view, it is true that several business functions and units are supported by the S&C Portal as compared to the WTO-TBT Portal (WTO-TBT Portal supports only the functions of WTO-TBT Enquiry Point) but the support to these business functions are founded on the same technological systems (e.g. CMS, Databases, Notification and Alert Systems).

Features of the Portal	WTO-TBT Notification Portal (ECA)	Standards and Conformance Portal (EMERGE)
Content Management System (CMS)	YES	YES
Online Databases and Data Management	YES	YES
Notification/Alert and Commenting Facility	YES	YES
Online Catalogs	YES	YES
Web Store	NO	YES
Message Board	NO	YES
Document Management System (DMS)	NO	YES
Search Mechanism	YES	YES

Table 5.1: List of Major Systems present in the WTO-TBT Notification and the Standards and Conformance Portal

BPS has proposed to simply remove from the S&C Portal those systems identified in the WTO-TBT Portal. This is not acceptable to EMERGE since the removal of these systems forming the core function set of the S&C Portal will leave the S&C Portal not meeting its objectives.

Even with the Document Management System not included in the TOR of the BPS with ECA, analysis of the functionality demanded of the WTO-TBT Notification Portal shows that it will

require a Document Management System but less complex compared to that demanded of the S&C Portal.

With the ECA technical assistance already being implemented, EMERGE decided to discuss the situation with BPS as it affects its phase II technical assistance. Several options have been presented to BPS and EMERGE to address the concern which includes a Stop-Gap approach (see section 5.2) that lets the two assistance go on its course without complementation. This approach characterized by duplication of efforts and resources is not acceptable to EMERGE. Even if EMERGE expressed willingness to implement the portal on its own, this merits BPS to abandon its commitment to the component of the technical assistance being provided by EU-TRTA.

The position of EMERGE not to duplicate technical assistance, maximize development efforts and resources, and reducing the risk of having the two portals suffer from integration problems the options of complementation and a single supplier was decided.

5.2. Stop Gap Approach

Having two separate Portal systems implemented by two technical assistance having its own suppliers may result to implementing the two portals on different technological platforms and methods. In this approach, two separate suppliers will develop the WTO-TBT and S&C Portal respectively. With the possibility of having different technological platforms and methods, and developed independently, additional efforts will involve the development of systems to make sure that the two portals exchange data and integrates with each other (a separate endeavor in its own to be taken). Even if the portals are developed on a single technological platform, (but still to be implemented by two different suppliers); the endeavor involves development of duplicate features, which can be characterized as:

- a. A costly implementation
- b. Requiring duplicate engagements with BPS
- c. Resulting to difficult and costly maintenance

With the condition involving the two portals sharing the same functionality set, both suppliers will implement the same core functions, resulting to duplicate development efforts. Such efforts also result to duplicate engagement with BPS consuming valuable time resources of BPS staff to accommodate these engagements. With these duplicate efforts, it also infers a very costly and wasteful development. With two systems in place, maintenance and sustainability also becomes costly and difficult.

Should the two portals were completed together with the necessary systems to exchange of information between two systems, with having the same functionality set it is inevitable that one portal system becomes a more favorable system to use than the other resulting to one of the portals not to be eventually used.

Even if it appears that the stop-gap approach to the situation is a simpler and direct solution, looking at the efforts that have already been done, and with the ECA-EU already along the way of its technical assistance, the complementing approach is a more suitable action to take.

5.3. The Single Supplier Option

With anticipated issues arising from the implementation of the portal with two complementing assistance having two separate suppliers; as well as the risk involved with this setup, the single supplier option was reviewed and considered by EMERGE.

With having two separate suppliers for EMERGE and ECA (even with each supplier having the same technological and development platform), the following issues may happen that can cause development to be delayed:

- a. Development methodologies of the two suppliers need to be synchronized
- b. Development efforts of the two suppliers need to be monitored separately and regularly coordinated. In software development, this is often times causing delays in the implementation since development of system often encounters changes to be made on one side that affects the other.
- c. Needed integration of the efforts of the two suppliers in itself requires additional time for testing

Aside from the risks involved with this setup, having a single supplier will mean reduced development time, consistent technological architecture and less coordination effort on the side of BPS. Both donors and BPS sees a single supplier option as a more feasible for the portal. To consider the single supplier option, an investigation of the capability and the ability of the technological platform proposed by SYSTEMA Corp for the WTO-TBT Notification Portal are needed to ensure that it can serve the requirements of the S&C Portal.

In order to assess the capability of SYSTEMA Corp, the features and functionalities of the S&C Portal was presented as well as the constraints on the development timeframe for EMERGE. The team of BPS and EMERGE finds SYSTEMA Corp's ability and capability to deliver the S&C Portal as favorable and recommended that the single supplier option already be implemented. Several factors have brought to this conclusion:

- a. SYSTEMA has an eGovernance Framework suitable to the S&C Portal
- b. The fundamental product that will primarily run the portal (Joomla!) has available components (that are also highly customizable) that can be used to implement the facilities of the S&C Portal. This means that development effort will not be from scratch such that the five (5) month development timeframe is a feasible period to complete the portal.
- c. The portfolio of clients and the experience of SYSTEMA on the platform selected
- d. The demonstrated ability of SYSTEMA to incorporate into the portal skeletal prototypes of the facilities of the S&C portal in a short span of time even during the evaluation of their capability.

Evaluation of the ECA process in the identification of SYSTEMA as a supplier also shows that it went through the stringent process of bidding and selection.

5.4. The Division of Assistance between EMERGE and ECA

In order to identify the division of assistance between EMERGE and ECA, several meetings were held with BPS as well as with the supplier for ECA – SYSTEMA Corp. SYSTEMA Corp’s expertise on the main product (Joomla!) that will serve as the foundation system for the entire portal could definitely give suggestions if divisions being thought of are feasible and doable.

Risk areas to the division of assistance is the difference in the delivery schedule of the prototypes and systems for ECA and EMERGE, complicated by the dependency of the systems identified for EMERGE to those identified for ECA (as well as vice-versa). Since EMERGE’s TA is ending ahead of ECA, it is important that the S&C Portal is finished which will result to finishing the WTO TBT Portal way ahead of its schedule. In consultations with BPS, SYSTEMA has committed completion of the WTO TBT Portal by June 2007, the same time the EMERGE TA needs to complete its assistance. In order to have almost the same delivery schedule, SYSTEMA was requested to synchronize delivery schedules for the two portals and submit it as part of its proposed work plan.

In order to formalize and finalize the division of assistance between EMERGE and ECA, a Donor’s Meeting was held together with BPS. It was proposed that systems (including data, content, documents, other information resources) that are needed to complete the WTO TBT Notification Portal will be funded by ECA and those remaining will be funded by EMERGE.

The S&C portal is composed of two elements – the systems and applications running the portal, and the different information resources (content, databases, documents, etc), that will be placed in the portal. In the case of systems and applications, activities that are funded include the analysis, design, development, implementation, maintenance, after sales support and training of users on these systems and applications. For information resources, activities that are funded include the gathering, preparation, processing, organization, conversion to digital form and migration of these resources. In order to give a more detailed division of assistance (specifically the items in which will be funded by the two assistance separately), these two elements have to be presented. In figure 5.1, the major systems and applications (those in blue and green boxes) for the S&C portal is shown as well as the different information resources (those inside white boxes) that needs to be placed in the portal.

BPS S&C PORTAL

Message Forums	Library System (Catalogs)	Database Management System	Content Management System	Notification/Alert and Commenting Facility	Document Management System
Web Store	Philippine National Standards Catalog	WTO Enquiry Point Related Databases Reference and Index Databases	WTO and Enquiry Point's Content	TBT Notification	WTO Enquiry Point Related Documents including Notifications
	Library Holdings Catalog ISO Catalog	Entire BPS Databases Pricing Index	Entire BPS Content	Standards Notification	Entire BPS Documents including Standards

Figure 5.1: Major Systems and Information Resources for the BPS Portal

The BPS Portal is composed of seven (7) major systems. These are:

- a. Content Management System
- b. Database Management System
- c. Notification/Alert and Commenting Facility
- d. Library System
- e. Document Management System
- f. Message Forums
- g. Web Store

In the terms of reference of each technical assistance activity, there is a search facility present on each portal. Since the search facility capability for the S&C Portal is complex to that of the search facility for the WTO-TBT Portal, development of search mechanisms needs to be funded by both assistance activities.

In the analysis of the ECA, three (3) out of the seven (7) identified major systems is important to implement the WTO TBT Portal (see figure 5.2). These systems are:

- a. Content Management System
- b. Database Management System
- c. Notification/Alert and Commenting Facility

It was agreed upon during the Donor’s Meeting that ECA will be funding the systems enumerated above as well as the necessary activities regarding the information resources needed for the initial build-up of the WTO-TBT Notification Portal (indicated in white boxes in figure 5.2). The remaining systems (indicated in blue) and the necessary activities regarding the remaining information resources (indicated in the light yellow boxes in figure 5.2) will all be funded by EMERGE. A summary table of the division of assistance between EMERGE and ECA is shown in table 5.2.

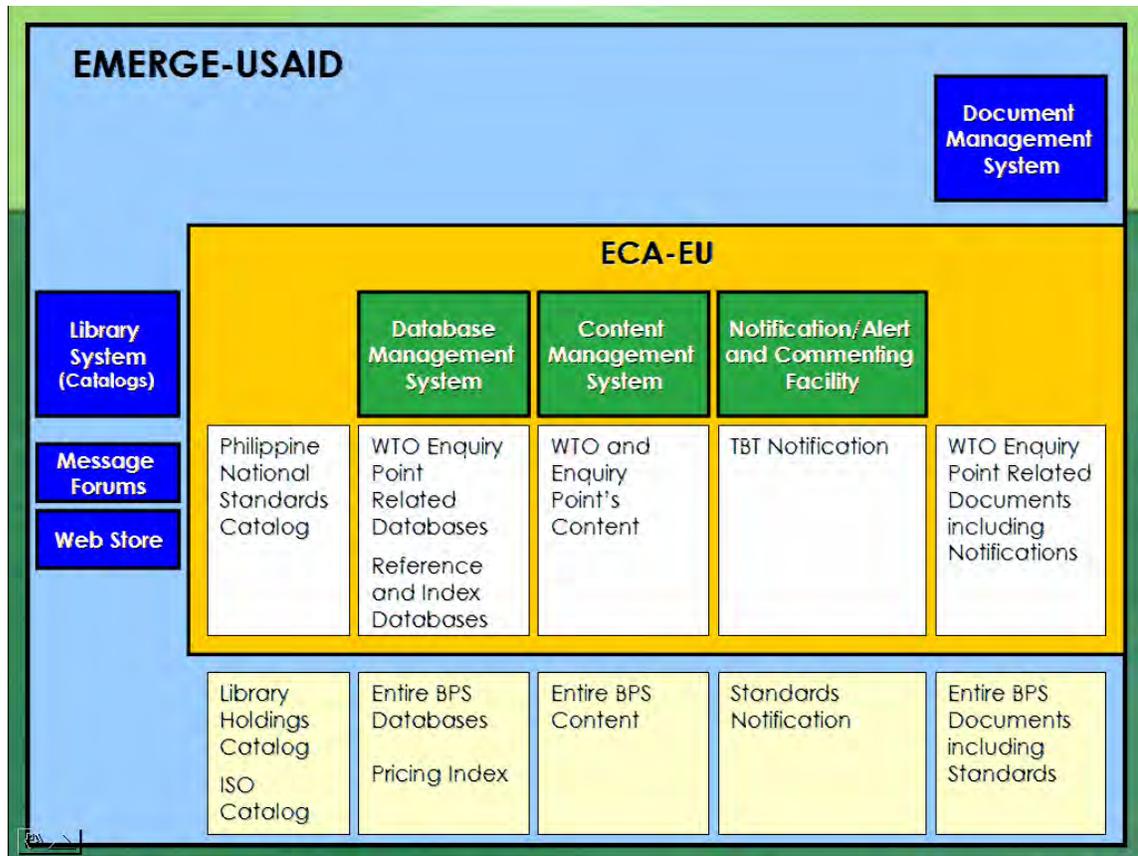


Figure 5.2: General Division of Assistance between EMERGE and ECA

S&C Portal Core Functionality	EMERGE-USAID	ECA-EU
1. Content Management System	NO	YES
• Email Newsletter	NO	YES
2. Online Database and Data Management Functions (For more detailed list of database, see document of actual list of databases. As a general rule, TBT-related databases are covered by ECA, the rest are covered by EMERGE)	NO	YES
○ Reference and Corporate Database	NO	YES
○ Divisional Databases	YES	NO
a. WTO Enquiry Point DB	YES	NO
b. PS and ICC License Holders	YES	NO
c. Products for Mandatory Certifications	YES	NO
d. ISO 9000 and 14000 Certified Companies	YES	NO
e. Accredited Labs	YES	NO
f. Certifying Bodies	YES	NO
g. Technical Committees	YES	NO
h. National Registered Auditors		
i. PETCs		
AdHoc Databases		
3. Alert and Notification System		
○ TBT alert	NO	YES
○ Standard alert	YES	NO
4. Catalogue Online (Engine or Library System)	YES	NO
○ Philippine National Standards Catalog (Content)	NO	YES
○ Library and Information Resources (Content)	YES	NO
5. Web Store	YES	NO
6. Message Board	YES	NO
7. Document Management System	YES	NO
Search Mechanism	YES	YES
Search on Content, Databases and Documents		

Table 5.2: Summary of the systems and Applications funded by each Technical Assistance

5.5. Hardware Factors considered in the Complementation

With the decided complementation arrangement between EMERGE and ECA, hardware complementation was also considered. With ECA-EU and EMERGE having either partner/included provisions on hardware acquisition, division on what hardware to be funded was also be considered.

From the proposed hardware configuration (see section 6.0), the same complementary arrangement was recommended such that the minimum hardware configuration needed to operate the WTO TBT portal will be funded by ECA and the remaining hardware needed to boost performance needed to run the S&C portal will be proposed to BSP (see table 5.3)

ECA-EU funded Hardware	BSP funded Hardware	Reason
Web Server	Additional Web Server	Another web server is needed since a single web server cannot handle user access load on the S&C portal.
Database Server	File Server	S&C will require a File Server for its Document Management System
Database Backup	File Server Backup	
UPS Set	Intrusion Prevention, Anti-Virus and Load Balancer	Access load is higher in S&C thus needing to balance load on web servers.
	UPS Set B	With the additional servers, another UPS will be needed in the implementation of the S&C Portal

Table 5.3: Proposed hardware support division between EMERGE and ECA

6.0 PROPOSED HARDWARE CONFIGURATION

The S&C Portal only included provisions for the development of S&C Portal and support for activities that will complement the development and use of the portal (e.g. concordance, establishment of TBTCCom and other administrative and technological development activities). Without the accompanying hardware component, the S&C Portal cannot meet its objectives. The Export Development Council (EDC) expressed funding support for the hardware component of the portal through the Export Promotion Fund of the Bangko Sentral ng Pilipinas (BSP).

EMERGE assisted the BPS prepare the hardware funding proposal to BSP. With the timeframe required for proposals and accompanying funding requirements to be processed, hardware configurations were estimated and developed ahead of the other activities of the TA. Thus, hardware configuration and specifications presented were estimated without consideration to the actual set of technological portfolio that will be used by the selected vendor developing the portal. It is expected that the vendor selected to develop the portal will be giving the more accurate set of configuration and specifications suiting the technological portfolio chosen and meeting the access requirements of users to the portal. At this point, an estimate is enough for the funding proposal to be drafted.

The drafted hardware configuration (see figure 6.1) is intended to give the BPS the extent of the hardware requirements needed for the implementation of the S&C Portal for a period of three (3) years without an upgrade. In the consultations made with the BPS IT Officer and the DTI MIS Personnel, having a configuration that can withstand requirements without upgrade for a period of three (3) to four (4) years is typical primarily due to the lack of funds allocation for technological upgrade. The configuration has been presented to Dir. Motoomull and has been incorporated to their hardware proposal for BSP.

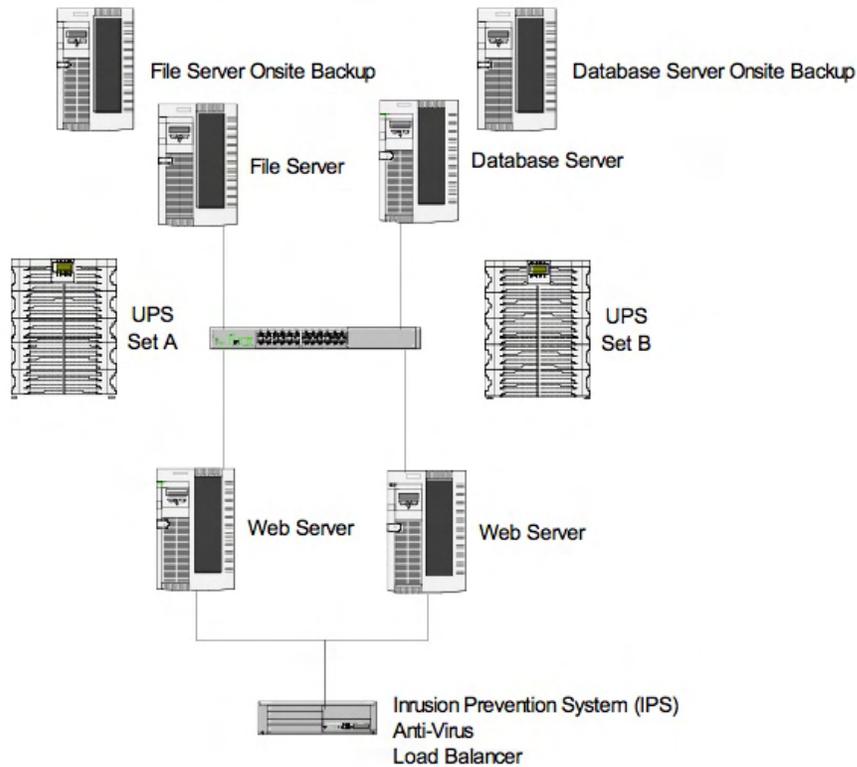


Figure 6.1: Proposed Hardware Configuration

The portal being a web facility requires a Web Server where the portal will actually be installed. The Web Server will hold the different content being published in the Portal. Aside from the portal itself, data stored in databases will require a separate server. Consequently, the use of the Document Management System (DMS), which will hold BPS documents, and the Philippine National Standards requires a separate server (File Server) as well.

The public access of the Portal may not be handled by having a single web server. It is recommended that at least BPS acquire two web servers, whose load will be managed and balanced by having a Load Balancer. Assuming there are no intrusion and virus detection systems in place, it is also recommended that together with the Load Balancer, an intrusion prevention system and anti-virus system is in place, preferably hardware based.

The Database Server and File Servers are recommended to have Onsite Backup Systems in order to easily recover from server failures. With the expected amount of data and files that will be accessed and stored in the S&C Portal, it is recommended that the disk storage to be used uses a RAID 5 100-180GB SCSI Discs that will not only give faster file/data retrieval but also its redundant hot swappable disk and storage design allows the system to easily recover from disk failures. Table 6.1 shows the recommended specifications for the three servers identified.

Database Server	File Server
Dual-32Bit Processor 2GB Memory RAID 5 100GB SCSI Discs (Hot Swappable) Redundant Power Tape Backup Drive	Dual-32Bit Processor 4GB Memory RAID 5 180GB SCSI Discs (Hot Swappable) Redundant Power Tape Backup Drive
Web Server	
Dual-32Bit Processor 2GB Memory RAID 5 180GB Discs (Hot Swappable) Redundant Power Tape Backup Drive	

Table 6.1. Server Specification Recommendations

Regardless of the location of these hardware resources, consultations with DTI-MIS reveals the need to procure a bandwidth manager that will facilitate the proper and dynamic allocation of internet bandwidth to different application systems of the DTI including the S&C Portal.

With ECA having a provision in its TOR the procurement of hardware, the configuration above could easily be divided between ECA and BPS' Hardware funding proposal for BSP. It could be justified that in order to run the WTO TBT Portal a minimum set of one (1) Web Server, one (1) Database Server and one (1) File Server is needed. The rest of the components in the configuration could be place as scope of the funding from the BSP.

6.1. Affordable Technology Portfolio

When hardware becomes an item of discussion, the systems software that will be installed also becomes a critical decision to be made. Several varieties of systems software exist in the market (e.g. Windows, Linux, Unix, OSX), in the case of BPS, critical consideration of the following should be made in the choice of system software:

- d. Cost-implications in the licensing and annual maintenance charges
- e. Availability of skill set in BPS or in DTI-MIS in the use of systems software

Only UNIX-variant system software like free Solaris and Linux qualify with these considerations. Although these systems offer free licensing, these systems have proven their reliability and robustness equal and to some extent far than its commercial counterparts. The DTI-MIS has experienced skill (in varying degrees) set in the use of Unix-based as well as Windows-based system software.

6.2. Implication of the Installation location of the S&C Portal Hardware

Even though the decision of where the S&C Portal Hardware will be located lies with BPS, analysis of the existing infrastructure and skills resources of the DTI-MIS shows that it is highly recommended that BPS consider locating hardware resources and the management of these resources to the DTI-MIS. This results to the removal of procurement of duplicate supporting resources but as well as being able to maximize existing skill set of DTI-MIS personnel in the management of the servers.

The reduction of costs in the acquisition of supporting resources (e.g. UPS, Air-conditioning) could be used in upgrading the specifications of the servers to reach a non-upgrade period of more than three (3) years. Other cost savings could also be used in the procurement of development machines that BPS could deploy to its key divisions involved in the creation of new and more responsive content and information.

With IT Personnel being important in ensuring that the S&C portal is available 24x7, cost savings could also be used for the upgrading of skill set of DTI-MIS and BPS IT Personnel who will be in-charge of maintaining the portals.

Even with a decision of having to establish its own data center due to specific procurement provisions in the TA and budgetary considerations on the side of BPS to support the option of outsourcing the maintenance and operations of the S&C Portal, co-location (or outsourcing server maintenance and operations) is still a recommended approach for BPS to take.

6.3. Contingency Measures in the procurement of the S&C Portal Hardware

Even with processing of the proposal ahead of its schedule, delays are still expected in the procurement of the S&C Portal hardware. Contingency measures were recommended by EMERGE to BPS, which includes the hosting of the S&C Portal for a period of one year after its full acceptance by BPS. Furthermore, to ensure EMERGE that the S&C Portal will be implemented in an available hardware, BPS has decided to configure the hardware requirements for the WTO TBT Notification Portal to be able to run the S&C Portal.

7.0 PREPARATIONS FOR PHASE II TECHNICAL ASSISTANCE

In preparation for the Phase II of the TA, EMERGE has identified key activities that needs to be performed. Aside from the development of the Portal itself, there are several activities that need to be conducted in parallel in order to complete the assistance to BPS. These activities form the several components of the Phase II TA.

a. Portal Development

b. Content Development and Migration

- Philippine National Standards Inventory
- Conversion of Philippine National Standards documents to PDF
- BPS Content Inventory and Migration

c. Database Development and Migration

- Database Inventory and Processing
- Database Migration
- Harmonized System (HS) and International Classification for Standards (ICS) Concordance

d. Establishment of the National TBT Coordinating Committee

7.1. Portal Development

The development of the portal is the responsibility of the selected supplier (SYSTEMA Corp.). Considering the limited timeframe of development, it was highly recommended that the supplier take a Rapid Applications Development (RAD) approach. In this approach, design and development is done all together through prototypes. This allows design to be easily validated because of the presence of a semi-working system. There are three proposed major incremental prototypes to be delivered by SYSTEMA Corp – the Alpha, Beta and Gamma Prototypes.

In order give BPS a starting idea on how the supplier intends to develop the S&C Portal, the Alpha Prototype will show the skeletal elements of the S&C Portal. Improvements in the Alpha Prototype will be incorporated in the Beta Prototype, which will also show the implementation of some of the features of the Portal with actual data. The Gamma prototype will show an almost completed S&C Portal. Comments and suggestions in the Gamma prototype will be implemented for the final release of the S&C Portal in June 2007.

Coupled with this approach, the intention of SYSTEMA Corp to conduct a regular workshop to gather specific requirements and have the portal evaluated and commented by BPS and its stakeholders is seen as an appropriate mode to take.

In the interest of monitoring and eliciting comments, the portal being developed will be available 24x7. As early during the final weeks of this phase of the TA, the being developed S&C portal is already available through <http://cms.systemacorp.com>

7.2. Inventory of the Philippine National Standards (PNS)

The availability of the Philippine National Standards in the S&C Portal is key in meeting the objective of increasing compliance of the business community to existing standards and regulations. Making the PNS available online requires that the PNS be converted into an electronic format.

The country has an estimated 4,000 Philippine National Standards. In the BPS Library, only an estimated 2,000+ PNS has been recorded. The country's PNS is either formulated or adopted entoto from existing international standards (e.g. ISO, IEC). Some softcopies of the PNS do exist and some of the adopted entoto PNS still have their source standard in softcopy.

When BPS got burned, some of the PNS have been destroyed. There were also reports that some of the PNS are already missing. These situations conclude that some of the recorded 4000+ PNS may no longer exist. Assessing this situation of the PNS in the BPS Library necessitates inventory to be conducted in order to determine the actual number of PNS that needs to be digitized. For budgetary requirements for Phase II of the TA, an estimate of 100,000 pages was given. This figure was derived from the estimate of (avg) 50 pages/PNS, and 2,000 PNS needing digitization.

7.3. Conversion of Philippine National Standards documents to PDF

Several factors were considered in the conversion of the Philippine National Standards to digital format, these are:

- a. The digital format must be an exact replication of the original PNS
- b. The file size of the digital format must not exceed 1MB. This is in consideration that the PNS is being delivered when bought online through email.
- c. Watermarking of the details of the person/company that bought the PNS in the digital format must be possible. This was an identified mechanism to reduce the possible proliferation of PNS digital copies.
- d. Text search within the PNS must be possible. The inclusion of this factor will allow stakeholders having digital copies of the PNS to search for keywords of their interests within the PNS.
- e. There must be available facilities and tools in the development of new digital copies of future PNS.

Among the several document formats, only the Portable Document Format (or PDF) satisfies the above-mentioned factors. There are two types of PDF -- image-PDF and a full-text PDF. An image PDF does not only satisfy the requirement of an exact replication of the original PNS but can also be completed in a smaller amount of time and does not require a letter-by-letter verification needed in a full-text PDF conversion.

7.4. BPS Content Inventory and Migration

In preparation for the migration of the BPS content into the portal, inventory of existing content needs to be conducted. It is expected that some of the contents will need to be re-processed and converted to suit the format of the new portal.

In the interest of advancing some of the activities before Phase II is approved, the BPS has already been mobilized to start content inventory and submit collected resources to EMERGE at the start of Phase II.

7.5. Database Inventory, Processing and Migration

BPS databases are stored in Word and Excel documents. In preparation for its migration to the portal, several processing is needed which includes:

- a. Converting existing format to database format
- b. Cleaning and transforming the data sets to conform to standards to be set by the supplier for the database.
- c. Restructuring data sets to conform to the SYSTEMA database structures.

With the relationships between databases need to be established, it is expected that a lot of data processing is needed in order to implement these relationships. The recommendation of having two (2) Information Technology Assistants may proved to not only provide a lower cost alternative for the TA but also can provide reduction in time since the activity could be done in parallel with the database design and development of SYSTEMA.

7.6. Harmonized System (HS) and International Classification for Standards (ICS) Concordance

The BPS as a standards body is using the ICS as its classification scheme. On the other hand, exporters, the business community and government agencies involved in trade are more aware of the HS classification scheme. When TBT (coming from a foreign standards body) arrives, commonly it is index based on ICS. It is a reported difficulty for some government agencies to identify the corresponding HS Code for the TBT. In order to serve the classification comfortable to both the stakeholders and BPS, a concordance between the two codes was identified to be an important contribution of the TA.

7.7. Establishment of the National TBT Coordinating Committee

Important to the success of the portal is the establishment and strengthening of the National TBT Coordinating Committee (TBTCom). Without a structure and institutionalized body that will address the concerns of TBTs as well as produce documents that will benefit the stakeholders, the portal's benefit could not be maximized. Information published and made available to stakeholders not only depends on BPS but also to the efforts of the TBTCom.

In order to establish the TBTCOM, it is important that several consultative meetings are conducted to elicit cooperation as well as comments and suggestions on how to best make the TBTCOM work and implemented. Part of the recommended activities for Phase II of the TA aside from consultative meetings are awareness seminars and workshops that will orient members of the TBTCOM about the country's commitment to WTO, the implications of TBT and how to go about addressing the concerns of TBTs for the benefit of Philippine business community.

7.8. Manpower Requirements

The activities for the components of TA Phase II require devoted and skilled manpower. The BPS has no enough manpower that could fully be dedicated to complete the activities identified for TA Phase II. BPS has requested EMERGE to include in its assistance the hiring of enough personnel that could assist in the establishment of the National TBT Coordinating Committee.

Aside from the manpower requirement for the establishment of the National TBT Coordinating Committee and the gathering of information resources about standards and regulations of the country's major trading partners, a big reduction in costs in the area of content and database development resulted to the identification of other positions for the TA. This option was taken by EMERGE given the estimate cost of DB and Content Development and Migration if handled by the S&C portal supplier.

BPS together with EMERGE has identified four key positions needed for the Phase II TA. These positions are:

- a. Information Technology Assistants
- b. Administrative Assistant
- c. Administrative Clerks
- d. Research Associate

7.9. Timeframe of The Technical Assistance and the Commitment of BPS

With EMERGE ending all TA by the end of June 2007, the timeframe for the Phase II TA has been limited to only five (5) months. This poses a great challenge for both BPS and EMERGE given that systems development projects similar to the S&C portal is typically done in an eight (8) to twelve (12) month timeframe.

With the several activities that needs to be performed aside from the development of the S&C Portal combined with the limited timeframe requires that the BPS commits time and ensures personnel availability for data gathering, validation and evaluation of activities and its respective outcomes.

In the 3rd BPS Working Group Meeting, this commitment was requested and BPS has named key personnel and their alternates (see Table 7.1) that will be assisting EMERGE in the conduct of its TA.

Division of BPS	Key Person Responsible	Alternate
AT1 Standards Development	Nilda Adao	Daisy Omila
AT2 Promotions and Media Relations	Camille Castillo	Glo Urbano
AT3 Enforcement	Sammy Paden	Raymund Ruelos
AT4 Testing	Gerry Panopio	Estrel Abejero
AT5 Certification	Frank Barranta	Rose Rino
AT6 Special Projects	Carmencita Magno	Melinda Cauilan
AT7 Information Services	Lourdes Navia	Victoria Homoroc
AT8 WTO TBT Enquiry Point	Victoria Campomanes	Herminia Gamit
AT9 International Relations	Sonny Erna	Aryan Basas
AT10 PETC	Atty. Jojo Jacob	Gerezon Bernal
PAO Philippine Accreditation Office	Nanie Fidelino	Ellen Cruz
QMR Quality Management Representatives	Malene Vitug	Daryll Cabalona
Office of the Bureau Director	Ryan Joel Estares	Mely Rayala
IT and Admin	Ryan Joel Estares	Josie Laroya

Table 7.1 List of BPS Staff (and their alternate) assigned to assist EMERGE in the conduct of its Technical Assistance

As part of its commitment, BPS has started to gather and inventory information resources that they plan to migrate into the S&C Portal. A guide to the type of information resources that each AT needs to prepare was given and is expected to be delivered to EMERGE at the start of Phase II TA. Furthermore, the BPS Library has started to do partial inventory of the PNS.

7.10. Budget and Cost Estimates for the components of Technical Assistance Phase II

As part of preparations for Phase II TA, several meetings were held between BPS and EMERGE to prepare budget requirements to conduct the different components of Phase II TA.

The budget items and cost estimates were based on the extent of programming required for the components of the BPS Portal to be funded by EMERGE, the compensation for the proposed hiring of six (6) support staff and the different meetings and workshops needed.

See appendix CC, DD for Cost Estimates

8.0 INTEGRATION

The phase I of the EMERGE Technical Assistance to BPS in the Development of the Standards and Conformance Portal was concentrated on the development of the functional specifications needed for the development of the Portal. To achieve this, systems appraisal was performed to identify areas that will be supported with specific functions of the S&C Portal. Assessment was made on the current procedures, practices and usage levels of the services provided by the BPS to its clients and improvements on how to align these with the business users' needs through the Portal. Particular emphasis of the assessment was made on these areas:

1. Providing information on standards, technical regulations, WTO TBT related information to all stakeholders
2. Providing mechanism for commentary on proposed technical regulations issued by WTO member countries; and
3. Facilitating compliance by the business sector with existing standards and regulations, and other measures.
4. Current ICT resources of the BPS

During the period of conducting the appraisal, information requirements of the stakeholders were gathered and investigation of BPS was conducted on the following areas:

1. Data and Process
2. Organizational Environment and Issues

The appraisal has highlighted areas that need to be attended to by BPS and a set of Concepts and Systems that will be part of the Portal were identified. One of the highlighted systems was the Electronic Document Management System, initially not identified in the Terms of Reference; this system was identified as a key solution to support the activities of the Technical Committees and members of the National TBT Coordinating Committee. Another highlighted system is the Library System also not part of the original Terms of Reference but also has been identified to be a critical system that will enable availability of information resources and library holdings of BPS to be made known by the public as well as the staff of BPS in aid of the conduct of their activities regarding Standards and Conformance.

Based on the appraisal and study made on BPS, functional and systems design of the S&C Portal that will provide BPS clients and stakeholders with a one-stop information center were identified. Hardware and software requirements were also identified. Hardware configuration and requirements have been used to aid BPS in drafting its proposal to EDC for the procurement of the needed equipment and resources to run the Standards and Conformance Portal.

In preparation for the Technical Assistance Phase II, a 5-month Work Plan detailing the list of activities that will be performed particularly on the required activities for the conversion and migration of content and information resources to the Portal. Likewise, a list of Training Modules were submitted to BPS as requirement to their supplier, that highlights important

topics that identified supplier needs to cover to develop the capacity of BPS personnel in the use of the Standards and Conformance Portal.

Activities concerning the supplier have been aided with the development of a detailed list of databases and the division of responsibility of BPS and SYSTEMA for the conversion and migration of documents and other information resources to the Portal. Furthermore, several meetings were held in order to fine-tune interpretations of expectations, features and functionalities of the Standards and Conformance Portal.

During the Technical Assistance, the overlap of assistance of ECA-EU and EMERGE-USAID was detected and several strategies have been proposed in order to address this overlap. Several meetings were held in order to address the concern of the overlapping assistance and come up with a complementary approach between ECA-EU and EMERGE-USAID. EMERGE Technical Assistance have been instrumental to make this complementary strategy be agreed upon and implemented resulting to adjustments to the current Terms of Reference of the EMERGE TA.

Among those affected of implementing this complementary strategy several identified deliverables and activities of the EMERGE TA Phase 1 were not conducted and developed. These are:

1. Establish the selection criteria for evaluating the firm, which will develop portal.
2. Assist the Project Steering Committee in evaluating the proposals for the development and establishment of the portal.
3. Assist the Project Steering Committee in the selection and evaluation of the successful bidder

Critical Success Factors for the Technical Assistance Phase 2

The conduct of the Technical Assistance Phase 2 activities given its short duration of only five (5) months is very critical to the success of the Standards and Conformance Portal. Activities are expected to be coordinated properly on the first two weeks of the assistance and supplier has already been informed about the need to carefully synchronize schedules and conduct parallel activities as much as possible.

Regular prototype evaluation as proposed in the TA Phase 1 has been improved further by requesting the supplier to make the portal being developed available online so that BPS and EMERGE could check its progress on a regular basis as well as give immediate feedback for adjustment early before it gets to be presented during prototype evaluations.

More important to the conduct of activities and making available systems and applications that will expedite the process of conversion and migration of resources to the Portal is the ability of BPS to generate content based on the principles that have been recommended on EMERGE TA Phase 1 System Appraisal Report.

APPENDIX A: BPS Acceptance of Phase 1 of the Technical Assistance

EMERGE Technical Assistance Program



15 December 2006

Dr. Myrna Austria
Team Leader, Trade and Investments
EMERGE

Dear Dr. Austria,

This is to communicate to you our acceptance of the EMERGE Technical Assistance Phase 1 Documents as submitted by Mr. Oliver Malabunan. These documents have been used in our discussions to finalize the arrangements between FCA and EMERGE. The Functionality Design of the Portal and related documents have already been forwarded to SYSTEMA Corp. for their project proposal to EMERGE.

Truly yours,

A handwritten signature in black ink, appearing to read 'Jesus L. Motoamull', written over a white background.

Dir. Jesus L. Motoamull
Bureau Director

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E-mail Address: bps@dti.gov.ph • Website: www.bps.dti.gov.ph

Membership:
• International Organization for Standardization (ISO)
• International Accreditation Forum (IAF)
• International Laboratory Accreditation Cooperation (ILAC)
• Enquiry Point for WTO Technical Barriers to Trade (WTO-TBT)

APPENDIX B: Letter of Approval Request for all Documents of Technical Assistance

EMERGE Technical Assistance Program

15 December 2006

Dir. Jesus L. Motoomull

Bureau Director
Bureau of Product Standards
Department of Trade and Industry

Dear Director Motoomull,

This is to submit for your acknowledgement and approval the following EMERGE documents, requisites to the EMERGE Technical Assistance Phase 2. These documents have been used as part of discussions during meetings with BPS, SYSTEMA, EMERGE and ECA on several occasions and have been adjusted accordingly based on the results of the meetings.

- Systems Appraisal
- Portal Site Structure
- Hardware Configuration Recommendation
- Features and Functional Specifications of the Standards and Conformance Portal
- List of Training Modules
- Work Plan for Technical Assistance Phase II

Aside from these documents, EMERGE also has written the following documents in aid of the activities concerning SYSTEMA for their development of the Portal. These documents were already transmitted to SYSTEMA for their preparations on the impending development activities for the Portal.

- The Concern over the EU-EMERGE Supported Portals
- EMERGE Assessment of Single Supplier Option
- Division of Assistance of EMERGE and ECA
- Preparation for the EMERGE Technical Assistance Phase II
- List of Activities to be performed in Phase II
- List of Activities to be performed by EMERGE Technical Consultant in Phase II
- List of Databases
- Conversion-Division of Responsibility
- Inventory of Databases, Content, Documents, Reports and Library Holdings
- Other items discussed with Mr. Troy Borja

These documents have been instrumental in the final resolution of the EMERGE and ECA scope of assistance to the Standards and Conformance Portal and has been forwarded to SYSTEMA for their reference on the conduct of their proposal submission to EMERGE for their services to implement the S&C Portal.

At this point, we will be commencing necessary preparations together with your staff specifically on the inventory and necessary processing of priority data, documents and content that will be part of the initial portal build-up as well as preparations for the implementation of online payment feature of the S&C Portal.

We would like to express our gratitude to you and your staff in accommodating our requests and cooperating with EMERGE in making this Technical Assistance a fruitful undertaking. We join your hopes for the successful implementation of the S&C Portal.

Truly yours,

Mr. Oliver A. Malaban

EMERGE Consultant

Appendix C: Pre-Final Report on the EMERGE Technical Assistance Phase 1

EMERGE Technical Assistance Program

The phase 1 of the EMERGE Technical Assistance to BPS in the Development of the Standards and Conformance Portal was concentrated on the development of the functional specifications needed for the development of the Portal. To achieve this, a gap analysis was performed to identify areas that will be supported with specific functions of the S&C Portal. Assessment was made on the current procedures, practices and usage levels of the services provided by the BPS to its clients and improvements on how to align these with the business users' needs through the Portal. Particular emphasis of the assessment was made on these areas:

5. Providing information on standards, technical regulations, WTO TBT related information to all stakeholders
6. Providing mechanism for commentary on proposed technical regulations issued by WTO member countries; and
7. Facilitating compliance by the business sector with existing standards and regulations, and other measures.
8. Current ICT resources of the BPS

During the period of conducting the appraisal, information requirements of the stakeholders were gathered and investigation of BPS was conducted on the following areas:

3. Data and Process
4. Organizational Environment and Issues

The appraisal has highlighted areas that need to be attended to by BPS and a set of Concepts and Systems that will be part of the Portal were identified. One of the highlighted systems was the Electronic Document Management System, initially not identified in the Terms of Reference; this system was identified as a key solution to support the activities of the Technical Committees and members of the National Network of Commentators for TBT's. Another highlighted system is the Library System also not part of the original Terms of Reference but also has been identified to be a critical system that will enable availability of information resources and library holdings of BPS to be made known by the public as well as the staff of BPS in aid of the conduct of their activities regarding Standards and Conformance.

Based on the appraisal and study made on BPS, functional and systems design of the S&C Portal that will provide BPS clients and stakeholders with a one-stop information center were identified. Hardware and software requirements were also identified. Hardware configuration and requirements have been used to aid BPS in drafting its proposal to EDC for the procurement of the needed equipment and resources to run the Standards and Conformance Portal.

In preparation for the Technical Assistance Phase 2, a 6-month Work Plan was drafted including the list of activities that will be performed particularly on the required activities for the conversion and migration of content and information resources to the Portal. Likewise, a list of Training Modules were drafted highlighting important topics that identified supplier needs to cover to develop the capacity of BPS personnel in the use of the Standards and Conformance Portal.

Activities concerning the supplier have been aided with the development of a detailed list of databases and the division of responsibility of BPS and SYSTEMA for the conversion and migration of documents and other information resources to the Portal. Furthermore, several meetings were held in order to fine-tune interpretations of expectations, features and functionalities of the Standards and Conformance Portal.

During the Technical Assistance, the overlap of assistance of ECA-EU and EMERGE-USAID was detected and several strategies have been proposed in order to address this overlap. Several meetings were held in order to address the concern of the overlapping assistance and come up with a complementary approach between ECA-EU and EMERGE-USAID. EMERGE Technical Assistance have been instrumental to make this complementary strategy be agreed upon and implemented resulting to adjustments to the current Terms of Reference of the EMERGE TA.

Among those affected of implementing this complementary strategy several identified deliverables and activities of the EMERGE TA Phase 1 were not conducted and developed. These are:

4. Establish the selection criteria for evaluating the firm, which will develop portal.
5. Assist the Project Steering Committee in evaluating the proposals for the development and establishment of the portal.
6. Assist the Project Steering Committee in the selection and evaluation of the successful bidder

One of the final activities conducted by the EMERGE Consultant is the negotiation activities aimed to reduce the cost to be incurred for the Phase 2 of the Technical Assistance. The strategy used was to convince BPS that some activities need to be transferred as part of their responsibility and not carry them all to SYSTEMA. Among those that have been agreed upon is the non-inclusion of a WTO and Standards & Conformance knowledgeable professional, reducing the pages for digitization from 150,000 to 110,000 and the exclusion of content uploading from the SYSTEMA coverage and have this covered by the responsibilities of the proposed four (4) support staff for BPS.

Critical Success Factors for the Technical Assistance Phase 2

The conduct of the Technical Assistance Phase 2 activities given its short duration of only five (5) months is very critical to the success of the Standards and Conformance Portal. Activities are expected to be coordinated properly on the first two weeks of the assistance and supplier has already been informed about the need to carefully synchronize schedules and conduct parallel activities as much as possible.

Regular prototype evaluation as proposed in the TA Phase 1 has been improved further by requesting the supplier to make the portal being developed available online so that BPS and EMERGE could check its progress on a regular basis as well as give immediate feedback for adjustment early before it gets to be presented during prototype evaluations.

More important to the conduct of activities and making available systems and applications that will expedite the process of conversion and migration of resources to the Portal is the ability of BPS to generate content based on the principles that have been recommended on EMERGE TA Phase 1 System Appraisal Report.

It has been highlighted that an **Inform, Involve, Contribute** strategy be used as a guide in the development of new content. In this strategy, BPS needs to look back at its content and review it using the eyes of its stakeholders and the public. Content must be educative and sensitive to the concerns of the myriad of users of the Portal. BPS content in its current form needs to be transformed to content particularly aimed to let the public understand the value of the activities and information being shared in the Portal; letting the public (more particularly the business sector) see the importance of Standards and Conformance activities and see the value of their active contribution and participation in the activities of Standards and Conformance.

During Technical Assistance Phase 2, EMERGE Consultant strongly recommends that activities that will educate BPS and its staff on the proper evaluation and perspective to use in the creation of content be done and careful review of their created content be done. It is definite though that BPS should be responsible enough to recognize that this need is something that the organization needs to address and can only be done by its staff and personnel alone. It has also been recommended that EMERGE supports the proposal of having a workshop for BPS regarding having a client and stakeholder sensitive content creation perspective.

Appendix D: Systems Appraisal Report

EMERGE Technical Assistance Program

Portal Concept and Organizational Appraisal of Systems and Procedures

Ideal Portal Concepts for the S&C Portal

This Portal project is about the use of Information Technology in the effort to increase compliance of the business community with the standards and technical regulations of the Philippines as well as that of the country's major trading partners. Information Technology plays a major role in the achievement of this objective by providing means for access and distribution of information about Standards and Conformance as well as providing a venue where the business community could participate in the standards development and conformance activities conducted by the Bureau of Product Standards (BPS).

The S&C Portal was envisioned to be a one-stop shop for information related to standards and conformance. The business community gets access to a collection of information about standards and conformance through a single online facility. The recommended portal strategy is one that goes beyond information delivery but also includes providing facilities for clients to reach BPS and vice-versa using a convenient medium like the Internet and mobile communication devices. This does not only foster open communication, but allows clients to get direct access to BPS information services and participate in various BPS programs regardless of existing geographical conditions. Technological advancement includes the provision of facilities for the proper management of data resources and the distribution of these resources to the public through broadcast and targeted active modes (pushing information to the public through alert systems using email and mobile alerts). Medium considered are the Internet and the mobile device being a prominent computing device by the General Filipino Public. With the provision of a project phase II and the assistance of other bodies in the procurement of hardware technologies in the implementation of the S&C Portal, technological gap that may be present could easily be augmented.

Inherently, the Portal as a technological solution targets the improvement of the quality of assistance (translated to information services) given to the business community. Improvement in quality translates to providing adequate and up-to-date information to clients. This denotes proper collection and selection of information resources, organizing them in a manner that could easily be explored and used. This responsibility lies in the hands of BPS and technology is seen as a medium in which this could be possibly carried out by BPS.

The relationships of the different divisions in BPS and their contribution to the overall service required of the bureau are remarkably clear and properly documented in the Quality Management Systems (QMS) documents. This is a good starting point in the integration of technology in an organization. The requirement for improvement in the quality of information assistance through a virtual environment such as a Portal demands a strengthened relationship among the different divisions through stronger data and document sharing and properly captured and facilitated information exchange. Aside from enabling divisions to capture, collect, select and organize resources, technology needs to enable these collected resources and recorded exchanges to be easily shared and accessed by other members of BPS. This creates a central pool of resources and knowledge (possible when communication exchanges are also captured) that each member of BPS could use in the improvement of their respective services.

The current portal situation in BPS

BPS is currently using a Portal that allows the general public to access information that BPS considers necessary for public consumption. The experience with the current portal serves as a good base point to realize the gaps present in the pursuit of any Portal development initiative like that of the Standards and Conformance Portal.

A portal is a gateway to various information and resources collected and organized by an organization and shared to a general or targeted audience. These resources could be part of corporate information or a set of resources gathered or created and collected by the organization as it conducts its business operations. The current BPS portal situation could be described as a disconnected medium connected only to the gathering, creation and collecting systems and practice in place through a set of manual process to facilitate the transfer, update and removal of resources to and from the Portal. The situation results to the IT Officer (in-charge of the Portal) to manually convert, translate and encode, and update these resources to be made available to the Portal. The Portal solution becomes a passive information dissemination medium liken to a content publishing effort not capable of involving users, exposing transactional services, and capturing their contributions to the published content. Currently, providing portal users with an email where their contribution could be given augments this. This again results to the manual conduit scenario where the IT Officer is tasked to manually

farm out these contributions to appropriate Action Teams (AT). The email system is primarily the main alert system used by BPS. Sufficient for its purpose, difficulties happen in the management and monitoring of this medium.

This situation is typical to an organization embarking in a technological public information system like a Portal without an internal set of technological systems in place that facilitates the gathering, creation, collection and organization of resources as well as processing information collected via the Portal. Ideally, a Portal is built when pre-requisite information systems (automated systems) are in place that assists users in the creation & collection, organization and maintenance of their respective data (or content). What the portal does is to interact with these systems to get information and deliver to external users. Furthermore, external users' transactional outcomes are accepted by the portal and send to the appropriate information system for automatic or human-led processing. Unfortunately, these pre-requisite Information Systems are not present in BPS.

The initiative has been primarily driven by a positive customer sensitive and cause. True enough that any initiative just like this should have an end in mind the clients as beneficiaries. But true as well is that facility benefiting clients only work if facilities are in place for internal users to prepare and process services. This is why internal computing requirements are typically addressed first before any external information requirements are addressed. In the scenario of the S&C Portal, much concern has been noted whether the limited time of the assistance could address internal computing requirements required of the demanded features in the Portal. It will be most likely that some of the demanded features will be relaxed in order to balance the computing support that can be given to internal users due to technical assistance constraints.

Any technological initiative that is not grounded or have been checked against an established Information Systems Plan, not following an established roadmap for the implementation of proper system requisites will typically end up with this situation of the S&C Portal. Technological leadership is demanded such that technology initiatives are incremental, properly planned preventing information system silos resulting to difficulties should future organizational systems integration is demanded. With this initiative already taking its course, a reverse roadmap is going to take place, with future initiatives eventually using the S&C portal as a core platform for the development of other information systems (to be viewed as extensions to the S&C portal). It is best that the organization starts to look and review its IS Plan and focus on initiatives and assistance that will enable the completion of the identified internal Information Systems portfolio. Future development efforts therefore will take the form of extending the features of the S&C Portal, building up on its already developed core functionality.

In order to address the gap and at the same time still achieve the near ideal scenario for the S&C Portal, portal development efforts will have to be oriented towards inclusion of functionalities that will enable at minimum level the creation, collection, organization and maintenance of AT data but taking into consideration that this is an opportunity for an effort towards an integrated organizational database.

Openness to Technological Solutions

Remarkably noted during the assessment of BPS is its openness to the use of technological tools to address several concerns in BPS. Particularly on the management and processing of data, BPS has exhibited an overwhelming acceptance that technology is a solution that can unify the organization to work in the pursuit of better assistance to its clients. To put it, BPS is an organization dedicated to pursuing quality service to its clients and is a hungry organization for technological assistance in this endeavor.

It has been duly noted during the conduct of the assessment that divisional silos may have not been intended and its existence is not seen as a regular state of business but rather an effect of the insufficiency of technological tools to achieve a unified and active bureau. Commend to BPS, is its ability to augment this insufficiency with manual process and efforts to near reach this organizational characteristics. Bureau unification has been a noted term throughout the assessment period and could be seen as a conscious recognition by the Bureau and its staff of the need to unify efforts in order to achieve higher efficiency and effectiveness in the delivery of its services.

It is unfortunate though that this initiative is primarily a technological solution addressing the concern of the business community (an external requirement) as it could have been primarily oriented towards a technological solution to address internal processing concerns resulting to beneficial effects to the business community. In this regard, we are seeing efforts to technologically address the concern of the business community and internally, limited technological catching up scenario because of development limitations accompanying this technical assistance.

Future technical assistance maybe possible to complete technological assistance on internal business operations but the impending portal initiative, efforts to address the silos could already be started. With portal features intended to partly support internal business

operations, preparations to move towards a unified organization assisted by technology could already be initiated. Preparations may be needed on the following areas:

- Orienting the BPS staff on the benefits of organizational unification through a common technological and integrated data platform
- Valuing and proper realignment of records management responsibility (with indexing) of each division as a key requisite towards rich information usage across the organization
- Movement towards data integration rather than data silos

BPS is an organization where quality is part of its organizational working culture. The presence of the QMR is a positive sign of openness to process adjustments that may be necessary to improve the quality of services. Portal implementation will require some task and process alignment due to the added data management tasks accompanying the technology. It has been highly noted during the assessment period that process alignment is an open initiative and corresponding data management additions is welcome as long as it does not become too much of an inconvenience and if benefits reaped in doing so will upgrade the quality of work and services that staff members provide clients.

Taking note of this acceptance to possible process alignments when the Portal is in place, keen consideration to the design of the portal is its ability to produce direct benefits to internal users. This could be made possible if internal users themselves could use the portal in support of their conduct of business. Taking into consideration the limited functionality that could be provided, keen selection on the internal functionality has to be made to add beneficial features for internal users, this serves a good criteria for prioritizing features for both internal and external users.

The S&C Portal

A better way to understand the organizational demands posed by the implementation of the S&C Portal, a glimpse of what the S&C portal will offer the business community is presented below. These features were client-centric concepts primarily looking at the demand and organization of information required of the stakeholders.

My S&C

In order to address the need for clients to get access to the various information and services offered by BPS, the MyS&C was conceptualized. In this facility clients are allowed create/view/update their personal and product profile, their interactions (including transactions) with BPS, access standards and conformance information related to their product profile and adjust their individual settings to suit their interaction style with the Portal.

One of the strategies being employed in the Portal is the contribution of information from clients and users. The MyS&C Personal and Product profile is intended as a requisite in order to avail of the other online information services offered by the Portal. This also allows the BPS database to be populated with critical information about companies and products for the Standards and TBT alert systems.

The MyS&C Portal's Contribute2BPS feature was intended to give clients a venue for contributing documents and other information to the portal's current wealth of information. With these facilities, the portal is promoting a community where BPS and its client share information that enriches the Portal's information collection.

Other information being supplied to clients are coming from data managed by Action Teams. To facilitate the proper management of these data, AT's must be provided with tools in order to properly manage the data they are primarily responsible for.

The table below shows the list of possible databases being managed in the Portal and the corresponding AT that is expected to manage them:

Database	Recommended Responsible AT
Companies and Products	AT7
Country Index	AT7
Products and Variant Index	AT7
Industry Index	AT7
Industry Associations	AT7
International Standards Catalog	AT7 with contributions from AT8 and AT1
Documents on process for Certification	AT5
ICC Certifications and status	AT5
PS Licenses and status	AT5
Documents on fees for Certification	AT5
Central Contacts Database	AT7 With each AT able to manage their own subset contacts
Accredited Quality Assessment Bodies	QMR
General Comments (non TBT and Standards Development Comments)	QMR
Inquiries and Complaints	QMR
Draft and National Standards Including comments and associated documents	AT1
Philippine Technical Regulations	AT1
Standards and Technical Regulation Interpretations	AT1
International Standards Catalog	AT7 with contribution from AT8 and AT1
International Standards and Conformance related Information and Links	AT8
TBTs and Technical Regulations from other countries Including comments and associated documents	AT8
Publications Catalog	AT7
ISO 9000/1400 Certified Companies	QMR
Accredited Testing Centers and Laboratories	AT5
News and Newsletter	AT2
AdHoc Database	Requesting AT With preparation to be made by IT officer
Users Database	IT Officer

My S&C Features

My S&C Sections	Capability
Personal Profile Log-in Information Personal and Corporate Information Industry Profile Industry Associations Contact Points	<u>User Account Update Services</u> Update login information Complete and update Personal and Corporate information Complete and update Industry Profile Complete and update membership in existing Industry Associations Complete and update contacts and contact information of BPS to the client or user <u>Information Services</u> View BPS Privacy Policy View complete BPS Industry Association Index (with search capability to ease up looking for specific association) View complete BPS industry index (with search capability to ease up looking for appropriate industry index for the client)
Product Profile My Products Upload Product List Product Index Request for Product Classification	<u>User Account Update Services</u> Register/Update products to be included in the product profile Identify from what plants (recorded under My Manufacturing Plants) these products are being produced Identify product for imports and exports Identify product destinations <u>Information Services</u> View complete BPS product index and already existing product variants (with search capability to ease up looking for appropriate index for the client's product) View complete BPS country index of Export destinations <u>Transactional Initiation Services</u> Should product variant does not exist on the database, client may request for update of BPS product index to include specific product variant Client may also request for BPS to categorize his/her product on the appropriate product index
Manufacturing Plants My Plants	<u>User Account Update Services</u> Register/Update information about client's manufacturing sites <ul style="list-style-type: none"> o Contact Person/s for the Plant o Plant Details (including location, region)
Alert Profile My Alerts! Alert Configuration	<u>User Account Update Services</u> View, Delete alerts Delete a specific Alert Profile configuration Adding of new Alert Profile could be done by clicking on Alert Me! buttons present on selected content/information

<p>ICC and PS Certifications ICC Certifications PS Certifications Certification Documents Renew/Apply for Certifications Certification Appointments</p>	<p><u>User Account Update Services</u> Register/Update company contact points on certifications</p> <p><u>Information Services</u> View BPS Conformance Program View ICC and PS Information View procedures and guidelines, corresponding fees for getting an ICC and PS Certification View accredited Laboratory and Testing Centers for products listed in the Product profile View requirement certifications on products listed in the Product profile View existing ICC or PS Certifications <ul style="list-style-type: none"> o View Certification details o Get status of ICC or PS Certification Applications </p> <p><u>Transactional Services</u> Inform BPS of intention for ICC and PS Certification Renewal or Application <ul style="list-style-type: none"> o Specify Products from the Product Profile intended to be certified o Upload documents for reference of BPS regarding Certification applications (but are not considered official since documents need to be submitted to BPS) o View response to intention request Schedule a meeting with BPS regarding Certification <ul style="list-style-type: none"> o View status of meeting request Send inquiry or comment regarding existing or currently being processed ICC or PS Certifications <ul style="list-style-type: none"> o View sent inquiries and comments o View response/status of inquiries posted Send complaints regarding existing or currently being processed ICC or PS Certifications <ul style="list-style-type: none"> o View sent complaints o View response/status of complaints posted </p>
<p>Quality Management Systems Certification QMS Certifications Certification Documents Renew/Apply for Certifications</p>	<p><u>Information Services</u> View Accredited Quality Assessment Bodies View information about Quality Management Systems</p> <p><u>Transactional Services</u> Inform BPS of intention to go for Quality Management Systems Certification <ul style="list-style-type: none"> o Upload documents for reference of BPS regarding Certification applications o View response to intention request Send inquiry or comment regarding existing or currently being processed Certifications <ul style="list-style-type: none"> o View sent inquiries and comments o View response/status of inquiries posted Send complaints regarding existing or currently being processed Certifications <ul style="list-style-type: none"> o View sent complaints o View response/status of complaints posted </p>
<p>Standards and Technical Regulations Local Standards and Technical Regulations Resources from other Countries TBTs and SPSs</p>	<p><u>Information Services</u> View the BPS Standards Development Program View Philippine National Standards and Technical Regulations affecting products listed in the Product Profile View TBTs and SPSs affecting products listed in the Product Profile View contact points on Technical Regulations from other countries View information on other countries' Standards and Technical Regulations affecting products listed in the Product Profile</p> <p><u>Transactional Services</u> Send inquiry or comment regarding listed Standards and Technical Regulations <ul style="list-style-type: none"> o View sent inquiries and comments o View sent inquiries and comments by other affected clients o View response/status of inquiries posted </p>

Contribute2BPS My Contributions	<u>Information Services</u> View BPS User-Contribution Policy <u>Transactional Services</u> View contributions to BPS Contribute contact points Contribute links and other resources Upload documents for reference of BPS
My Orders	<u>Transactional Services</u> View status of the order Cancel order (if not yet processed by BPS)
Inquiries and Comments My Inquiries and Comments	<u>Information Services</u> View BPS categories and typical inquiries belonging to the category <u>Transactional Services</u> Send inquiry or comment (with specific category of the inquiry or comment) <ul style="list-style-type: none"> o View sent inquiries and comments o View response/status of inquiries posted
Complaints My Complaints	<u>Information Services</u> View process for posting complaints to BPS <u>Transactional Services</u> Send complaints (with specific category of the complaint) <ul style="list-style-type: none"> o View complaints forwarded to BPS o View response/status of complaints
BantayConsumer Report to BPS	<u>Transactional Services</u> Report to BPS any products (under mandatory regulation) in market circulation that may be suspected non complying with standards <ul style="list-style-type: none"> o View sent reports o View response/status of reports posted
My Settings	<u>Transactional Services</u> Change interface profile

BPS Information Center

The BPS Information Center contains the collection of documents, information and links related to Standards and Conformance. The Information Center can be viewed as the S&C's digital library where users can browse through a vast set of collected information by the various AT's on Standards and Conformance.

Primary information content

- About BPS
- About Standards and Conformance
- Programs and Projects
- News and other Announcements
- Philippine National Standards and Technical Regulations
- International Standards and Regulations (this includes TBTs)
- Publications and Newsletters
- PS License Holders
- Import Commodity Clearance Holders
- ISO 9000/14000 Certified Companies
- Accredited Laboratories
- Accredited Quality System Certifying Bodies

- Local and International Standards and Compliance Contact Points
- BPS Documents Library
- Frequently Asked Questions
- AdHoc Databases

Salient features of the Information Center include giving clients an opportunity to give comments and inquiry on any information published in the center, and tell the portal to alert the client for any updates or changes in any published information. A search engine is provided to help clients to explore information based on specific terms. An advance engine function allows users to specify terms for particular information fields of interest. Information stored in the center is related through the BPS Indexing System. The same system is used when new ad hoc databases are created: each record of ad hoc databases has keywords and cataloged according to any of the index found in the BPS Indexing System. This allows the portal not only to automatically show specific information of interest but also related information that may be of interest to the users.

Inform, Involve, Contribute Strategy

In increasing compliance of the business community with local and international standards and technical regulations, an INFORM, INVOLVE and CONTRIBUTE strategy needs to be in place. Basic to the increasing compliance effort is to inform the business community about what standards and technical regulations are in effect and will be in effect, how to go about conforming to these standards, and assisting the business community in their conformance to these standards and technical regulations. In order to achieve this, BPS needs to involve other bodies outside of BPS in the generation of a wealth of information to assist the business community. Business and industries even though the primary beneficiary of this initiative is part of a two-way relationship where their contribution is critical to increasing the collection of information translated to assistance services to the entire community. These contributions may be in the form of contacts, links and references, feedback, comments, documents, assistance information for other companies, among others.

BPS acknowledges the importance of cooperation of the business community with its efforts in achieving the mutual goal concerning standards and conformance. Community driven efforts could be seen through the continuous updating and involvement of the business community of the activities of the BPS through newsletters and projects. In support to this existing effort, the S&C Portal should not just be an information gateway but also a community building medium where the business community and BPS embarks on a co-beneficial relationship to assist the entire country achieve conformance and product entry to major trading partner countries. Technology paves way to make this relationship a reality by providing technology-assisted means for interaction and information exchange.

BPS, aside from being a participant, is a builder of this community and is responsible for initiating exchanges, sustains and manages the exchanges in the community, translating these exchanges to useful addition to the existing database. At this point, no existing division has been identified to potentially manage this community and be responsible for sustaining and transforming exchanges to useful database additions. Aside from these, a community seed building strategy must be setup that will serve as a catalyst whose exchanges itself invites participation from others, eventually growing into a wide participated community.

A community-building feature that will be incorporated in the portal is the Standards and Conformance Forum (or message board). Just like any forum, the S&C Forum houses a number of forum subjects particularly related to standards and conformance. In a forum, members of the community exchange ideas, commentary, questions and answers, and suggestions. This promotes an open communication regarding various concerns of the members of the business community. Following the experience of the GOV.PH forum, a rich vault of information is formed about how to go about living and addressing concerns in the Philippines caused by discussions and forum exchanges. The forum becomes a bank of answers to the dozens of questions about living in the Philippines, from law clarifications to setting up a business, even voices to popular political and business issues in the Philippines. The same community energy is aimed with the S&C Portal. Not only that the forum opens voices to different members of the business community, it also becomes a good source of data for BPS in their pursuit for better information service to its clients.

The success of this Forum lies in the moderation and monitoring by identified groups of people. Forums tend to be very chaotic and disorganized should there be lack of moderation and monitoring of exchanges. The inability of the forum to be organized and to answer and immediately reply to posted concerns and questions turns away community members for the basic reason that the forum is unable to assist in the quest for answers by the member. It cannot be expected that community members be actively answering questions

posted in forums. It takes a group of people hosting the forum to actively answer questions posted in forums igniting others to also contribute. This also entails the extraction of exchanges in the forum and transforming them to useful knowledge bank (e.g. FAQ's).

The significant question to answer in the implementation of this feature is who will be in charge with the responsibility to manage the forums? In order to come up with a recommended AT to own and manage the forum, analysis focused on the nature of the exchanges in the forum. Primarily, these exchanges are typically inquiries and commentary, which may be managed and owned by the QMR. But primary issue to assigning this to QMR is that answering inquiries (typical of that for AT5 and AT7) are not prime domain of QMR but rather on the AT capable of answering the inquiries. QMR may be responsible for transforming this information to useful knowledge bank and publishing them structurally through FAQ's. What could eventually happen is that inquiries, postings are monitored by QMR and farmed out to respective AT's for reply. This poses a challenge to receiving AT's to give immediate reply to the posted inquiry in the forum.

Information Services and an Active Bureau

Part of the long-term scenario with the S&C Portal is BPS being an active Bureau. Looking at the entire collection of data required for an active Bureau, it is unfortunate that data about the business community that the portal will serve is limited if not known to BPS. Collected information about companies and their products are restricted to those who have transacted business with BPS (either through certification applications, inquires or other activities). Presence of this information has been noted from other divisions and external organizations and it is necessary to capture, collect and organize these for the purpose of the S&C Portal.

A very important activity of an organization is the active collection of references and other information for the use of the entire organization. Analyzing the potential of each Division in this conduct, assessment attention was captured by the Information Services Division of BPS. The Division's services and activities center on Library Services, Standards Data Centre (although analysis shows that the nature is the same as Library Services), Sales and Ordering of Standards. With the impending implementation of the S&C Portal, the wealth of information depends of the vastness and proper organization of external and internal data sets collected by BPS. With the other divisions as business transactional units of BPS, the Information Services Division is seen as a potential business service unit to the entire BPS by being primary division leading this data collection and organization effort.

Technological Systems on the Management of Data

Equally important to the distribution of information is the ability of BPS to prepare these sets of information. Achieving this objective requires an internal grounding of processes and technological systems that facilitate the collection, recording and organization of data, processing of contributions and transactions; and transforming them into useful data adding to the already collected information. The information technology penetration in BPS is currently limited to the use of Office Automation tools like Microsoft Word and Excel for the management of its data and information. With the exception of AT5 (the division concerned with Certifications), Information Systems are not in place in BPS. Communication and exchanges are done through email and has form part of the working culture in BPS.

With a QMS in place, the lack of information systems is augmented by a set of manual processes, properly documented and disseminated across the organization for implementation; a set of physical filing structures and organized computer folders. These manual processes together with built forms facilitate activities and data recording activities in BPS.

Technological Systems are only part of the solution in place concerning management of data. Responsibility and culture of data collection and management form part and parcel of this solution. Data Management responsibility is one of the key items to settle when embarking on an initiative like the S&C Portal. Divisions keep data that they need for them to perform their function. These data silos work and ensure that each AT's can work at their own pace and independence. By the nature of this records and data management practice, formed silos often results to difficulties in immediate sharing, tracking and processing for analysis and reporting requirements. Aside from these, the ownership of data (often includes the management and maintenance of that data) becomes gray and thrown to other divisions to handle. With the S&C Portal initiative, these silos must be broken and work on the notion of a common corporate data for BPS. Benefits of this include fast extraction of knowledge through reports.

Integrated Database and existing Data Silos

One of the drivers that make up a successful Portal is a solid database holding data items used to generate information and translated to services for the Portal's target audience. This database must be an integrated collection of relevant data maintained by BPS's various Action Teams (AT) centrally stored and made available not only for the Portal's target audience but also to support each AT's operations. Currently, BPS has no central-integrated collection of data stored in an electronic database. Each AT is maintaining a "database" either on electronic flat files like Microsoft Excel and Microsoft Word, on Microsoft Access and in a database managed by an AT-specific Information System. This may have been the reason for the lack of data standards on particular data sets that are common among the different AT's.

Key to the generation of information is the relationship among data items. Currently, investigation shows that a BPS Central Indexing System for its data items is necessary to establish these relationships. These indexes attached to records maintained by BPS will allow every record to be related (in some way) to another set of records, allowing information to be generated in various dimensions. The full implementation of the international indexing systems like ICS, coupled with the current indexing system on PNS, TBTs, and Industries is a recommended method.

Each AT having its own data management practice uses their own way of recording data items. When an organization embarks on an effort to consolidate and integrate data into a central database, it entails agreeing on data and format standards. Currently, due to the prevailing data management silos, data standards are not present resulting to difficulties and delays due to additional processing when data from AT's need to be integrated. These standards (format, elements of data to be recorded, structure, etc.) set on data items must be conformed by the members of the organization. Having a central integrated database demands a uniform way to record data items in the database. In this way, data recorded will be consistent, complete (as required) and can enable (and ease of) developing reports on various dimensions possible.

Business Community Readiness and Participation

One of the hurdles to the success of this idea is the readiness of the business community to actively participate in the portal instead of being a passive recipient of the collection of useful information offered by BPS. Several incentives must be in place together with the Portal in order to encourage active participation from the business community. These incentives can only take the form of value-added services in which the alert system has been identified. Another strategy that could be put in place is the identification of services and information that can only be available to registered and participating portal users.

Promotional efforts have been planned in order to intensify the awareness of the business community with the benefits of the Portal for them, this may gather grounds for the business community to take a look at the services of the portal but cannot guarantee their active participation. Partnering with the associations in encouraging their members to take an active role in is another effort to consider but it could only go to the extent of invitations.

This clearly shows that the active participation is not demanded but rather an effect should the portal provide venues to do so and the information quality and quantity in the Portal is adequate to suit the information requirements of the target beneficiaries.

Sustainability Concern

Part of the assessment made is the capability of BPS to sustain the life of the Portal. The life of the Portal depends on the continuous engagement by the business community on it. Their engagement can only be expected if its content is up-to-date, rich and seen as a helpful resource in the conduct of their compliance to standards and regulations. This requires an organization handling the Portal to be proactive in searching for information resources outside of BPS, organizing them and putting them into the Portal. Proactivity also dictates that the organization consistently anticipates client questions and concerns, scout answers even before clients raise this.

Several sources of knowing what clients are concerned with could already be found at several client contact points in BPS, from client inquiries, certification engagements, and inspections. Equally important as identifying these sources is identification of key people or groups of people that will be responsible in the conduct of assessing and anticipating these concerns and actively seeking answers.

Web Store

Organizational structures and policies for the implementation of the Web Store are still not in place. The limited time of technical assistance will not give enough time for the proper negotiations and agreement concerning the conduct of payment online. In this regard, portal feature on web store need to be relaxed but necessary readiness for online payment should be implemented. Relaxed features still include online ordering and status checking of orders with facilities for internal processing of the orders.

Summary of Appraisal

The S&C Portal is a promising initiative that could serve as a catalyst to open various concerns in BPS concerning internal processing. Overall assessment shows that as an organization, BPS has no present information systems present to address the demands of the features of the S&C Portal, but remarkable of BPS is its ability to augment this insufficiency with properly documented manual processes.

Remarkably noted during the assessment of BPS is its openness to the use of technological tools to address several concerns in BPS. BPS has exhibited an overwhelming acceptance that technology is a solution that can unify the organization to work in the pursuit of better assistance to its clients. It has been duly noted during the conduct of the assessment that divisional silos may have not been intended and its existence is not seen as a regular state of business but rather an effect of the insufficiency of technological tools to achieve a unified and active bureau. Commend to BPS, is its ability to augment this insufficiency with manual process and efforts to near reach this organizational characteristics.

It is unfortunate though that this initiative is primarily a technological solution addressing the concern of the business community (an external requirement) as it could have been primarily oriented towards a technological solution to address internal processing concerns resulting to beneficial effects to the business community. In this regard, we are seeing efforts to technologically address the concern of the business community and internally, limited technological catching up scenario because of development limitations accompanying this technical assistance.

In order to address the gap and at the same time still achieve the near ideal scenario for the S&C Portal, portal development efforts will have to be oriented towards inclusion of functionalities that will enable at minimum level the creation, collection, organization and maintenance of AT data but taking into consideration that this is an opportunity for an effort towards an integrated organizational database.

BPS is an organization where quality is part of its organizational working culture. The presence of the QMR is a positive sign of openness to process adjustments that may be necessary to improve the quality of services. Portal implementation will require some task and process alignment due to the added data management tasks accompanying the technology. It has been highly noted during the assessment period that process alignment is an open initiative and corresponding data management additions is welcome as long as it does not become too much of an inconvenience and if benefits reaped in doing so will upgrade the quality of work and services that staff members provide clients.

Taking note of this acceptance to possible process alignments when the Portal is in place, keen consideration to the design of the portal is its ability to produce direct benefits to internal users. This could be made possible if internal users themselves could use the portal in support of their conduct of business. Taking into consideration the limited functionality that could be provided, keen selection on the internal functionality has to be made to add beneficial features for internal users, this serves a good criteria for prioritizing features for both internal and external users.

Part of the long-term scenario with the S&C Portal will require BPS being a pro-active and technology-integrated Bureau. In order to do so, several areas concerning management of data need to be addressed in preparation for it (even it is beyond this technical assistance)

- Breaking of data silos and re-orientation towards an integrated corporate database rather than divisional databases
- Identification of proper data management responsibilities in lieu of an integrated and corporate view of data
- Moving from passive collection of information to active collection of information and translating them to information services to clients

Appendix E: Information Requirements of Stakeholders

EMERGE Technical Assistance Program

Information Requirements discussed during the Stakeholder's Meeting

During the meeting with the stakeholders and BPS, the stakeholders mentioned several areas of services that they see beneficial to their member companies. They also suggested facilities, which can enhance the ability of the Portal to attract contributions from companies. Since the stakeholders that gave requirements during the meeting are coming from the perspective of exports (except for PCCI who may be representing companies in general), their requirements can be viewed pegged with requirements of exporters vis-à-vis information requirements relating to their target offshore markets. Looking at those at the opposite side of the spectrum, it can be deduced that importers on the other hand may have the same requirement set but geared towards requirements related to the Philippine market.

Generalizing the information requirements, we could see that the following are the information set that companies views beneficial to them (both local and offshore market related).

Standards

Layman's Interpretations of these standards

Conformance

- Accredited Laboratories and Testing Sites
- Bodies and Agencies concerned
- Requirements for Imports or Exports
- Requirements for Licensing (PNS or ICC)

Technical Regulations

- Notifications of new/updates on Technical Regulations
- Layman's Interpretations of these notifications

One interesting suggestion mentioned during the meeting is the establishment of features that could enhance community building of companies/individuals related to Standards and Conformance. A type of forum or message boards was suggested as a feature to consider.

Anchor Principles for the Design of the S&C Portal

During the meeting, the idea of the Portal being a venue to exchange and contribute information has been highlighted. In this context, we are seeing the Portal to be designed with features that will facilitate these exchanges. It has also been emphasized that aside from the stakeholders and companies as users of the portal, persons and groups, which will be defined by an institutional structure to support the Standards and Conformance efforts, will also be users. Mentioned groups include academe, the DOST, groups and persons that can contribute to the portal by giving interpretations of regulations, other regulatory bodies that can contribute standards and notifications under their respective jurisdictions.

By looking at the points where contributions will be coming from to enrich the data resources of the Portal, we are defining the anchor points to which the features will be based.

Management of Risk

Based on the discussions, it may seem that the information that needs to be open to the users through the portal may not be completely be gathered (or have been gathered), organized (or may have been organized) by BPS. There is risk in pooling of data to enrich the Portal's information resource. These require mechanisms to pool these data together (with BPS being a controlling body of these data through the Portal). Although involvement of other bodies/agencies/individuals and providing them with features to contribute to the pool of data was not covered in the TOR of EMERGE, it is **HIGHLY RECOMMENDED** that we take a look (and focus) on facilities to support information exchange and complete the cycle of information flow through the Portal and compromise at a certain extent features that may not directly involve this cycle.

Appendix F: Partial Assessment Report on the Systems Appraisal of BPS (August 2006)

EMERGE Technical Assistance Program

Partial Assessment Report

It may expedite the process of identifying key functionalities of the Portal as well as the boundary of the functionality it can provide to both the staff of BPS and its clients by primarily identifying what services and information needed to be served by the Portal to its stakeholders. When these are being identified through consultations with the stakeholders, there is a need to manage the risk of inflating the Portal expectations to the point of escalating demand for automating some of the internal work functions of BPS.

Portal Development is an effort to extend existing services to its clients and stakeholders through an online facility. Development efforts are concentrated on providing a central gateway to the various information and services of the organization. The concentration of Portal development is the development of central interface facilities that connects to the existing application systems being used by the organization (see figure 1.0). With the lack of internal automated systems in BPS, the information and transactional services provided for by the Portal will require to some degree development of applications that will enable the creation and centrally storing of required data. This extends Portal Development to reach some level of automation development effort.

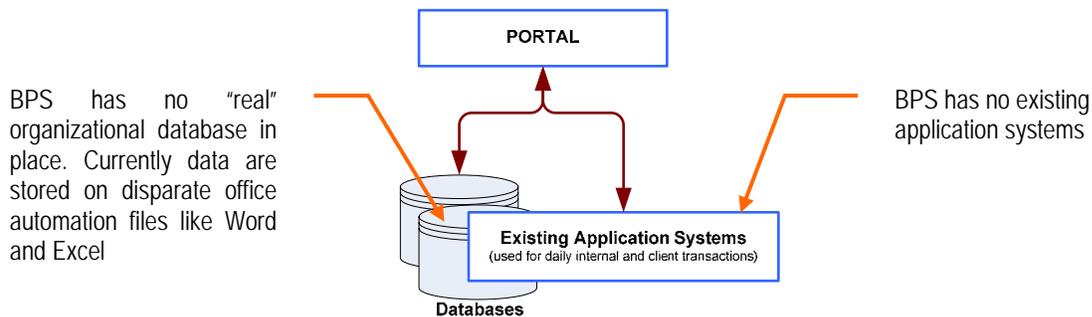


Figure 1.0

Aside from internal automated systems, BPS has no real database being managed. Most of its "database" are on office automation software files, which are difficult to track and processed for analysis and reporting services. This may be the reason why data are disparate and difficult to maintain and manage. The condition of work in BPS is tightly integrated with maintaining a central repository of data, which can cater to different data requirements of each AT. Having a central repository of integrated data allows for consistency and ease for reporting requirements. With the Portal Development at hand, it is imperative that we move some of the concerned BPS data and integrated them into a "real" database and data management facilities (and process adjustment in the use of) to be developed for each AT that will maintain the integrity and reliability of these data. The orientation for Portal Development for BPS may be viewed as seen on figure 2.0

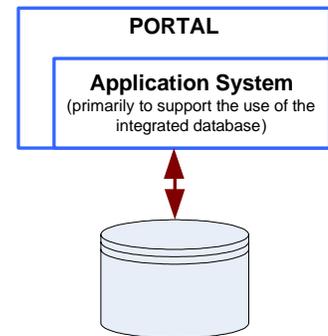


Figure 2.0

Since the basis for the services and functions provided for by BPS to clients and stakeholders are documents (PNS, TBTs, and other processed information/reports), an assessment approach may be appropriately conducted not by process-document (or data) basis but rather on document (or data)-process basis. That is, investigation is conducted on the creation/initiation of documents until it gets published (as services) to stakeholders. Quality documents are process-data basis but it could be a good starting point when investigating document lifecycle.

As a recommend course of action based on the discussion above, the following information and documents need to be gathered for analysis:

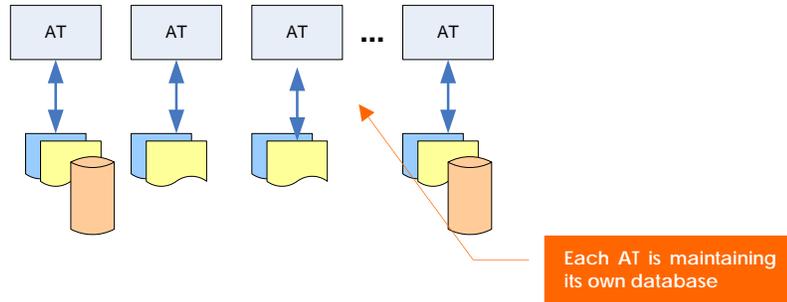
- a. Copies of existing "databases"
- b. Copies of operating manuals concerning the use of these "databases" from the following AT's
 - a. Standards Development
 - b. TBT Enquiry
 - c. Standards Information Services
- c. Portfolio of applications used to maintain these "databases" (e.g. MS Word, MS Excel, etc.)
- d. Regular set of reports required of BPS staff to produce coming from these "databases"

Appendix G: Data Integration Effort

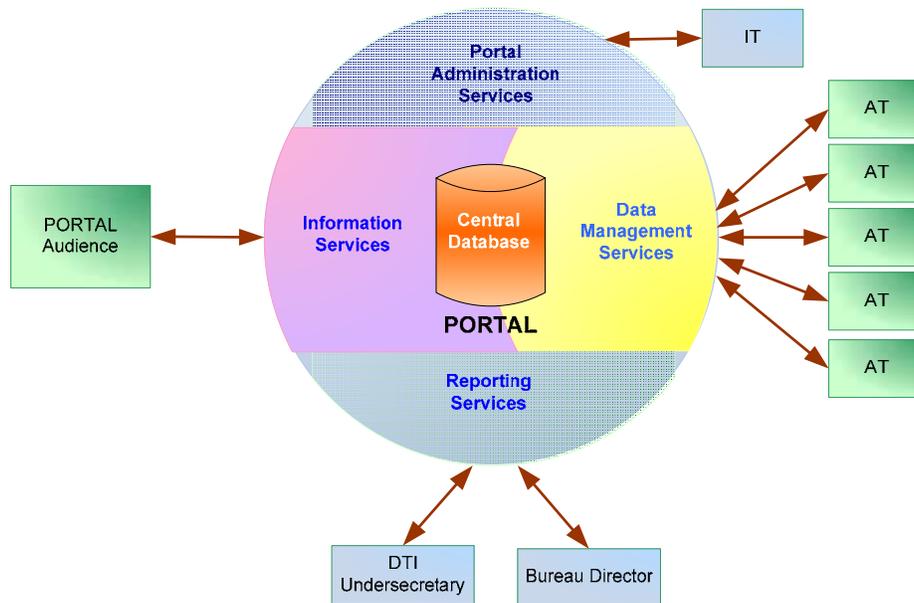
EMERGE Technical Assistance Program

CENTRAL INTEGRATED DATABASE

One of the drivers that make up a successful Portal is a solid database holding data items used to generate information and translated to services for the Portal's target audience. This database must be an integrated collection of relevant data maintained by BPS's various Action Teams (AT) centrally stored and made available not only for the Portal's target audience but also to support each AT's operations. Currently, BPS has no central-integrated collection of data stored in an electronic database¹. Each AT is maintaining a "database" either on electronic flat files like Microsoft Excel and Microsoft Word, on Microsoft Access and in a database managed by an AT-specific Information System.



Following the approach recommended to be taken for Phase 1 of the Portal Project, effort should start in preparing plans for the development of an central integrated database for the storage of data items relevant to the generation of information required of the Portal's audience. In the attempt to integrate data items, the effort will include mapping out the data management responsibility of each data over the integrated data. Furthermore, these data items will have to be checked for completeness against the reporting service and information service requirements of the BPS Director, the DTI Undersecretary and the Portal audience.



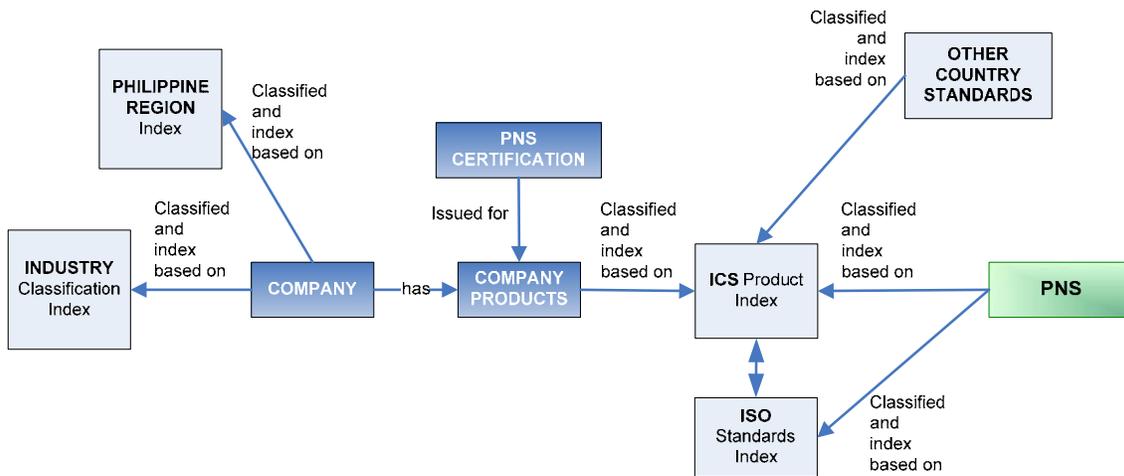
¹ We will refer database as an electronic database (also referring to "real" databases).

Central to the effort of coming up with a central-integrated database for BPS are:

- a. Completing the information and reporting services requirements and mapping them to the data items being maintained by the AT's
- b. Inventory of data elements being maintained by each AT
- c. Inventory of ownership and maintenance of each data element
- d. Definition of a mechanism to relate each of these data anchoring on the production of information and reporting service requirements²
- e. Definition of a mechanism in terms of process to maintain the relationship between data as defined as well as the consistency and integrity of data stored on the integrated database

Key to the generation of information is the relationship among data items. Currently, partial investigation shows that a BPS Central Indexing System for its data items is necessary to establish these relationships. These indexes attached to records maintained by BPS will allow every record to be related (in some way) to another set of records, allowing information to be generated in various dimensions. The full implementation of the international indexing systems like ICS and ISO, coupled with the current indexing system on PNS and TBTs, is a recommended method.

To illustrate the benefit of a BPS Central Indexing System in place, let us have this very simple example of an index fully implemented on the records of BPS. In maintaining database of companies and their products, if each of the company's products is indexed according to ICS Product Index, they get to be automatically related to the appropriate PNS and other country standards.



² Initial assessment shows that relationship between data items being maintained by BPS could be established through complete implementation of the following indexes: PNS index, ICS index (pertaining to Product Index) INDUSTRY index

Some opportunities with this sample INDEX SYTEM in place

- a. When a PNS has been approved to be withdrawn, BPS could easily find out what companies will be affected by the Withdrawn PNS and an appropriate alert could be given.
- b. When a TBT arrives, when this is index accordingly using the ICS Product Index, companies that are affected by the TBT could easily be listed and notified accordingly.
- c. An exporter with their products (properly indexed using ICS) could easily find out STANDARDS from other countries that they are interested to EXPORT to.
- d. Importers with their registered products could easily find out Philippine National Standards that they should comply to in order to get ICC.
- e. The BPS Director can select a PNS and companies whose products are certified on that PNS could easily be retrieved (as well as the products they have that have been certified)
- f. The DTI Undersecretary may opt to look into a demographics of how many products have been certified under a particular PNS
- g. The Regional DTI could easily check for companies being affected by a particular PNS

Central Integrated Database as an Effort

When an organization embarks on an effort to consolidate and integrate data into a central database, it entails agreeing on standards and conformance. These standards (format, elements of data to be recorded, structure, etc.) set on data items must be properly conformed by the members of the organization. The migration of existing data sets to conform to the standards will likewise be done.

Having a central integrated database demands a uniform way to record data items in the database. In this way, data recorded will be consistent, complete (as required) and can enable (and ease of) developing reports on various dimensions possible.

For example, if a standard was set that all address information should be recorded with the following information:

Address Line 1, Address Line 2, Barangay, Municipality, City, Province, Region, Country

And with the corresponding standard values for Country corresponding to ISO Country Codes, further, if a Province to Regions index is in place, the database could be ready for queries relating to address such as:

- Products by Region
- List of PNS Certified Products by Region
- Manufacturing Companies and their corresponding Industry Segments in the City of Makati

Furthermore, with TBTs encoded using standard ISO Country Codes and if the database also contains countries, which companies are exporting to (using the same standard values), getting the list of companies that are affected by regulations coming from a specific country could also easily be retrieved, and notification could easily be implemented.

Likewise, with a mandated standard to use ICS to index all products recorded on BPS database (e.g. products recorded on database of PS Certifications) BPS is not just having a standard way of recording products, but also will be able to relate their other records that also uses ICS as an index (e.g. TBT notification). As an example, the organization can now specifically pinpoint companies going to be informed of the TBT notifications³. And as BPS builds its products databases with their respective ICS codes, the organization is actually building along the way a thesaurus of products in the Philippines, which in turn enriches its Indexing System.

For BPS, these standards although in place, may have been partially implemented in some areas of the organization. With the need for a central integrated database, these standards should be completed and fully implemented.

³ as discussed on previous discussions in this document

As a recommendation, a technical working group should be in place to decide on the standards to be applied to data items. The working group will be in-charge of the following:

- Identifying BPS core data set
- Format and structure of the BPS core data set
- Identifying Migration issues and risk and recommendations to minimize the risk

Data sets only concerning each AT can be discussed by the head of the AT and the EMERGE-IT Consultant in coming up with the data set standards.

Recommended course of Action:

- a. To complete the inventory of the reporting service requirements of BPS Director and DTI Undersecretary
- b. To complete the inventory of the information requirements by stakeholders
- c. To complete the Inventory of data elements being maintained by each AT
- d. To complete the inventory of ownership and maintenance of each data element
- e. Mapping of the reporting and information requirements to the data items being maintained by the AT's
- f. Definition of Data Standards
- g. Definition of a mechanism (INDEXING SYSTEMS to use) to relate each of these data
- h. Definition of a mechanism in terms of process to maintain the relationship between data as defined as well as the consistency and integrity of data stored on the integrated database

ASSISTANCE TO THE USERS OF THE INDEX

When the BPS Indexing System is in place, users should not be left without a tool in order to effectively use the Indexing System. The portal should include an index locator where users have the option to enter a keyword and the system will assist him/her in looking for the appropriate index to use (just like what is shown below).

The image shows two screenshots from a Microsoft Internet Explorer browser. The top screenshot displays the 'ICS Index Selection Tool' interface. It features three search input fields: 'Use ICS number to search', 'Use keyword to search the ICS index' (containing the text 'Electronics'), and 'Use PNS number to search'. A 'Submit' button is located to the right of the PNS field. Below the search fields, there are radio buttons for 'Show for each result codes for' with options for 'ICS', 'PNS', and 'ISO'. Three links are provided: 'View complete PNS Catalog', 'View complete ISO Catalog', and 'View complete ICS catalog'. A table lists various electronic components with their corresponding ICS, Philippine National Standard, and ISO codes. An orange arrow points from the 'Electronic components in general' row in the table to the second screenshot.

Scope	Product Thesaurus	ICS Code	Related Products/Service	Philippine National Standard	ISO Standard
Electronic components in general		31.020		PNS ISO 37245:2004	ISO 37245:2004
Resistors		31.040		PNS 31:2003	
Capacitors		31.060		PNS 31:2003	
Semiconductor devices		31.080	Semiconducting materials	PNS 31:2003	
Electronic tubes		31.100		PNS 31:2003	
Electronic display devices		31.120		PNS 31:2003	
Piezoelectric devices		31.140		PNS 31:2003	

The bottom screenshot shows the 'Product Index Details' page for 'Electronic Components in General'. It displays the following information:

- Product:** Electronic Components in General
- ICS Code:** 31.020
- Philippine National Standard:** PNS ISO 37245:2004
- Related Products:** none

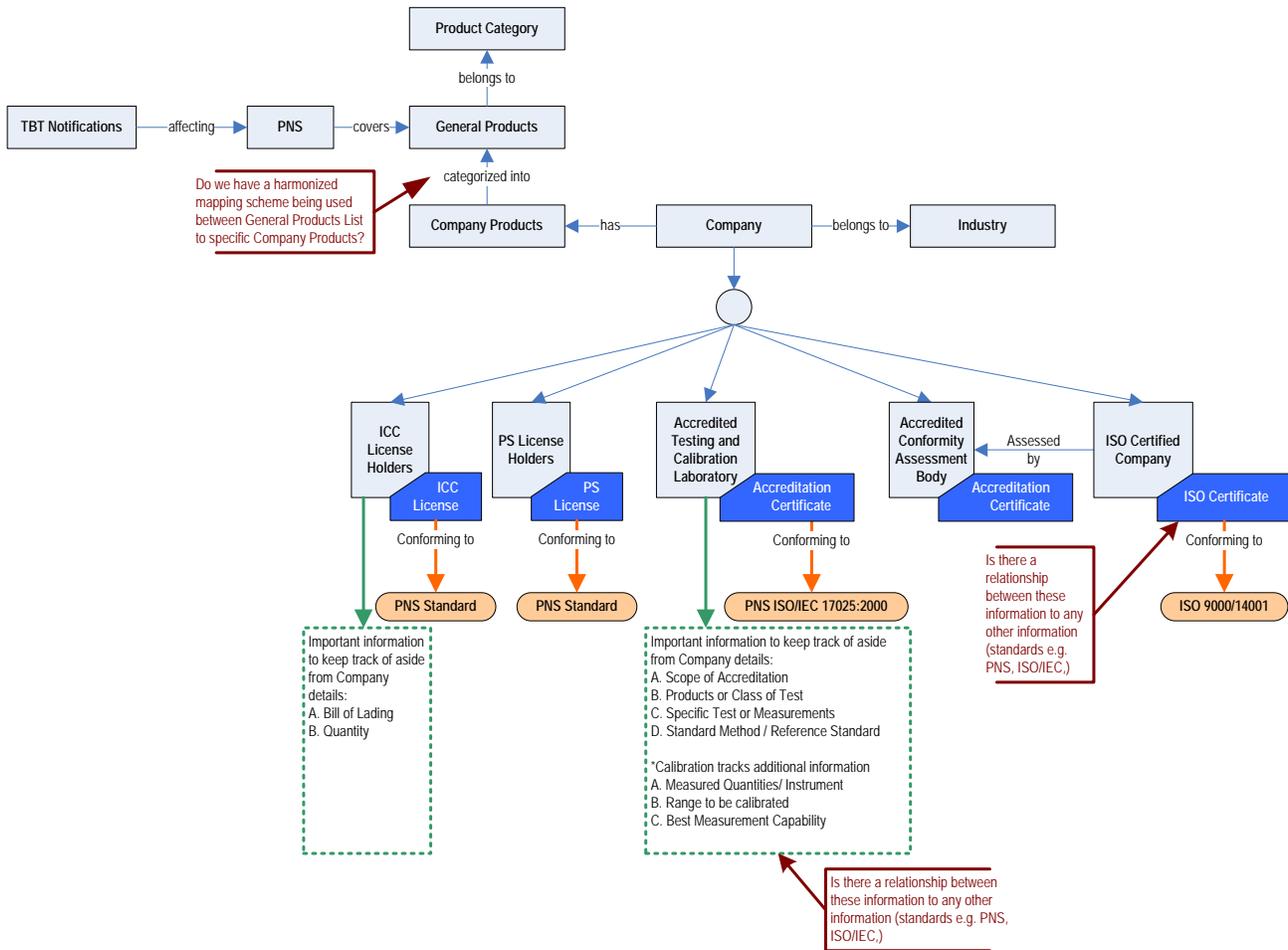
Below this information are three links: 'view all companies importing these products', 'View all companies exporting these products', and 'View all Philippine Products belonging to this category'.

Appendix H: Integrating BPS Databases

EMERGE Technical Assistance Program

INTEGRATING BPS DATABASE

Key to integrating databases is a set of relationships between the different data sets maintained by different AT's. In the analysis of the database submitted by BPS, this relationship centers on PRODUCTS/SERVICES and STANDARDS. That is, key to the integration is the use of the ICS Classification for Standards and Products/Services. The use of the ICS Classification in all of the data items recorded and maintained by BPS will allow viewing of its stored information in various perspectives.



Appendix I: The Concern over the EU-EMERGE Supported Portals

EMERGE Technical Assistance Program

A Report to EMERGE-USAID on issues surrounding the overlap of EU and EMERGE supported Portals

This report is being submitted to EMERGE as requested by Dr. Myrna Austria, Team Leader for Trade and Investments Group to act as input document to the possible resolution to be made on the Donor's level about the current concerns and issues on the European Commission and EMERGE-USAID supported portals.

Background

Standards and Conformance Portal (S&C Portal) : EMERGE-USAID Supported Portal
WTO-TBT Notification Portal (WTO-TBT Portal) : ECA-EU Supported Portal

At the time the EMERGE Technical Assistance was approved and have started in BPS in July 2006, the WTO-TBT Portal was also being processed by BPS. In September 2006, it came to the attention of the EMERGE IT Consultant that the general functionality set of the ECA-EU supported Portal were actually parts of the S&C Portal. EMERGE Consultant felt that this will soon raise an implementation problem and should be addressed immediately. This concern over how eventually the two portals will be developed and implemented was immediately raised to EMERGE.

BPS has expressed that definitely there should only be one Portal. EMERGE agrees on such articulation. As such the situation could now be characterized with one Portal (referred to in this document as BPS Portal) being funded and supported by two donors with similar and common functionalities articulated under their respective Terms of References.

An initial strategy was proposed during the meeting with BPS Director Jesus Motoomull (attended to by the BPS IT Officer, Ms. Vicky Campomanes and EMERGE Consultant) to simply remove the functionality set of the WTO-TBT Portal from the S&C Portal, and have the two systems work seamlessly as one. In the same meeting, it was explained that such as strategy is easy said than implementable. Technically, the overlap functionalities form part of the core functionalities of the S&C Portal. In a business perspective point of view, it is true that several business functions and units are supported by the S&C Portal as compared to the WTO-TBT Portal (WTO-TBT Portal supports only the functions of WTO-TBT Enquiry Point) but the support to these business functions are founded on the same technological functionalities (e.g. CMS, Databases, Notification and Alert Systems). Following the strategy proposed, it will cause removal of the core function set from the S&C Portal.

In the several discussions that already have been made over the concern, the following questions have been raised:

- Who will support what part of the BPS Portal?
- How will it be develop and ensured that the BPS Portal will be in place
- Keeping in mind of having only one BPS Portal, in what hardware resources will the portal be made operational? On ECA-EU hardware or the BSP funded hardware (as an element of the S&C Portal initiative)?

In this report, a stop-gap approach is presented. Although this stop-gap approach may appear to be the simplest course of action to take where one donor abandons its initiative and leave one donor to handle the Portal initiative. In this approach, it is more likely that ECA-EU abandons the initiative and allow EMERGE to handle the Portal initiative following the fact that the S&C Portal covers also the TBT Notification Portal. This approach can only be taken though depending on the decision of ECA-EU and BPS. At the point of writing this report, ECA-EU is still on its way on awarding the supplier for the WTO-TBT, the single supplier option is still being considered and a donor-to-donor complementing meeting is a recommended step to be taken.

Included in this report is the hardware configuration and general specification as it has been part of the discussions the hardware needed and what elements of the configuration that the donors will eventually fund.

Core Function Set of the S&C Portal

The core functionality of the S&C Portal after assessment of BPS situation and the demand for information of stakeholders are as follows:

S&C Portal Core Functionality	Included in WTO-TBT Notification Portal
8. Content Management System <ul style="list-style-type: none"> Email Newsletter 	YES YES
9. Online Database and Data Management Functions <ul style="list-style-type: none"> Reference and Corporate Database Divisional Databases AdHoc Databases 	YES YES (Only for WTO-TBT Enquiry Point) NO
10. Alert and Notification System	YES (Only for TBT notifications)
11. Catalogue Online <ul style="list-style-type: none"> Standards Library and Information Resources 	YES YES (Only for resources of WTO-TBT Enquiry Point)
12. Web Store	NO
13. Message Board	YES
14. Search Mechanism	YES
15. Document Management System	NO (But may be needed for WTO-TBT Enquiry Point)

Looking at the table above, we can see that both the S&C and WTO-TBT portals share the same core functionality set and may only differ in terms of the content and data being placed on the Portal. Although having the same core functionality, there may be detailed features that may cause differences on both Portals. Since the design of the both the S&C and TBT Notification Portals are not yet completed (not started in the case of WTO-TBT Portal), these minute feature details cannot be presented. With a single set of internal and common set of external users, we are not expecting these minute details to be wide although the S&C Portal will definitely have more features compared to the WTO-TBT Portal.

Current Scenario

ECA-EU has not officially awarded contract to the recommended supplier of BPS – SYSTEMA Corp. EMERGE likewise has not identified a supplier yet for the S&C Portal and is currently considering the Single Supplier Option as recommended by BPS and EMERGE IT Consultant. Such option will infer supplier of WTO-TBT Portal to be the same supplier for the S&C Portal.

Selection Timing for the Supplier on the Single Supplier Option

Following the idea of a single supplier option, the timing effect of the selection and awarding of contract to the supplier either from EMERGE-USAID or ECA-EU is important to consider. If the situation where the ECA-EU supplier has been awarded first, it follows that the EMERGE-USAID accepts the same supplier for the S&C Portal. Should EMERGE-USAID select and award suppliers ahead of ECA-EU (a situation that is possible to happen if delays and problems currently being encountered with the ECA-EU will continue), it is highly possible that (considering without initial agreement between donors) that the ECA-EU WTO-TBT Notification will be placed in a dilemic situation since it is being covered under the S&C Portal.

Complications on the matter may arise should the following situations happen:

- ECA-EU decided not to award supplier with the WTO-TBT Notification contract
- ECA-EU selected supplier will not agree on the contract terms, backing out of the project
- EMERGE-USAID would not accept terms/conditions and process of selection of the ECA-EU supplier and deems ECA-EU supplier not qualified to implement S&C Portal

Situations #1 and #2 will cause delay in the ECA-EU selection and contract awarding process will cause EMERGE-USAID to go with the project without consideration to the existing condition of the ECA-EU project. Situation #3 will cause Single Supplier Option not anymore implementable.

Activities that have been performed

Discussions in BPS

As soon as the EMERGE Consultant became aware of the existing ECA-EU initiative, several discussions were held with the BPS IT Officer. During these discussions, it has been consistently considered that the Single Supplier Option is the viable option to pursue with respect to reducing duplicate development efforts and the development time constraint of the two initiatives. Since at the level of the EMERGE Consultant and the BPS IT Officer, such option will involve administrative and executive decisions from BPS and EMERGE, a meeting was suggested to be held between BPS Bureau Director (Dir. Jesus Motoomull) and EMERGE Technical Director (Dr. Ramon Clarete) and Trade and Investments Team Leader (Dr. Myrna Austria). It has to be noted that ECA-EU was not made aware of the situation involving the EMERGE-USAID initiative. EMERGE at the onset has consistently expressed their concern over the situation and their intention not to duplicate efforts and adjust accordingly to make the S&C Portal implemented successfully.

Meeting with Dr. Clarete and Dr. Myrna Austria of EMERGE

In the meeting held at the BPS Conference Room, EMERGE officials together with Dir. Motoomull were presented with implementation options for the ECA-EU and EMERGE-USAID portals. It was also presented in the meeting the recommendation and importance of ONE PORTAL development effort running on a single technological platform regardless of a single or two supplier options. During the same meeting, it was noted that the implementation options also needs to consider the timing and schedule of implementation of the two initiatives as it will cause considerable added effort on the supplier during development (possibly to cause delays in development).

First Option

The first option presented is to let ECA-EU implement the WTO-TBT Portal and let EMERGE follow-implement the additional requirements of the S&C Portal. The option could have been a fitting alternative if development schedule and effect over actual operation of both portals is not considered.

Considering the schedule of implementation of the two portals, two possible strategies were presented:

- a. WTO-TBT Portal gets implemented and finished first before EMERGE implements S&C Portal (either with same or different suppliers)
- b. WTO-TBT Portal is expected to be implemented by November 2006 with the S&C Portal expected on January 2006 (with separate suppliers)

In situation A, following the schedule of EU-ECA, development of WTO-TBT Portal will be finished by March 2007. This implies that development of other features for the S&C Portal commences by April 2007, leaving EMERGE with a window time of only 2 months (with EMERGE having to cease assistance by end of June 2007). The resulting window time is not feasible considering the needed time to develop and test the S&C Portal.

In situation B, with two separate suppliers working on the two portals, significant amount of coordination and implementation cooperation is needed in order to ensure that the two portals will be communicating with each other. This development method has been proven to be logistically and administratively difficult, resource-heavy and development time due to the needed cooperation and coordination will likely to be extended and delays on both parties can be expected.

Second Option

The second option presented is to have a single supplier for both WTO-TBT and S&C portals. During the meeting it has been expressed that BPS has already recommended a supplier for the WTO-TBT portal and only waiting for formal confirmation and awarding of contract. The supplier was selected primarily because of the existence of a product (JOOMLA) that only needs adjustments and customization. At this point, the idea of other suppliers other than that of SYSTEMA has not been entertained following that this supplier already has been screened and recommended for contract awarding.

Following this option, the concern was raised on whether if the same product and supplier is capable of handling the requirements of the S&C Portal. Should supplier and their products can handle the requirements of the S&C portal, the option will cause the following:

- a. EMERGE has to recommend revision of the existing TOR taking into account that there will be no more bidding to take place
- b. Development of the S&C Portal will commence (almost) at the same time with the WTO-TBT Portal

- c. EMERGE IT Consultant activities, deliverables and roles will change since the development will commence during the supposedly design phase of the EMERGE TOR.

During the meeting, Dr. Clarete has expressed that EMERGE can make the necessary adjustments as long as there is justification for doing so. To assist the justification needed, EMERGE IT Consultant and BPS IT Officer were requested to meet with the ECA-EU supplier in order to get information and assess its capability in meeting the requirements of the S&C Portal.

Third and Last Resort Option

The third (and last resort) option is to implement the two portals separately following their own development schedule. Since ECA-EU will be starting first, EMERGE supplier has to develop the single interface for the two systems and to take note of the development that has already been started. With two separate suppliers working on the two portals (during an overlap period of January to June 2007), significant amount of coordination and implementation cooperation is needed in order to ensure that the two portals will be communicating with each other.

From the three options presented, the second option has been seen as a more fitting and more beneficial option. As such, priority was set to gather more information as to the implementation of the second option. Meeting with the EU recommended supplier was scheduled but unfortunately was moved two weeks later due to scheduling difficulties.

Effect on the Design of S&C Portal

The design of the S&C Portal has been in gray following the possible implementation of a single supplier option. With an existing product, design of the S&C Portal has to be adjusted in lieu of the constraints of the product. Development using a product is an effort of feature negotiation since the product cannot be customized down to the level of what is being needed such that feature compromise is necessary.

Applications Development using a Product, and the Design Activity

Should there be a package to be used, the point of designing the Portal without consideration to the existing functions and capability possible on the product will not be an effective activity to take. Development using the product often involves series of prototype where design (which is done while application is being developed) is adjusted directly (and iteratively) on the product in use.

This method of merging design and development has been a proven method and is employed by various development projects. Related to Rapid Applications Development, usability risks are minimized because of this method. This has been the reason that EMERGE Consultant has pushed for the immediate resolution of the concern on the two initiatives as to recommend the immediate change in the activities to be performed while still at the early onset of the design stage.

If ever Single Supplier Option is decided, role of EMERGE IT Consultant is converted to a technical conduit translating concerns of BPS requirements for the supplier. In this way, it serves as an independent consultant in charge of recommending and negotiating features with the supplier.

Meeting with the EU Recommended Supplier – SYSTEMA

As per request of EMERGE, a meeting with the ECA-EU recommended supplier took place two weeks (due to scheduling constraints) after the meeting of EMERGE with BPS. Prior the meeting, it was a strategy that the supplier will not be informed that they have been recommended and the objective is to introduce the S&C Portal and the being considered Single Supplier Option. The meeting was intended aside from informing the supplier of the situation at hand, to elicit information about the supplier and its capability. At this point, EMERGE has no information about the supplier and only during the meeting was this presented.

After the meeting with SYSTEMA, an assessment report was produced and submitted to BPS and EMERGE. In the assessment made by the EMERGE Consultant and the BPS IT Officer, the ECA-EU supplier (based on their presentation) is technically capable of delivering the portal. In order to back this assessment and finally recommending to EMERGE the implementation of the Single Supplier Option, documents were requested from the said supplier. This has been officially communicated through a letter sent by BPS to SYSTEMA. To assist and expedite response, SYSTEMA was given copies of the Appendix A of the EMERGE TOR as well as the draft design document of the S&C Portal.

EMERGE Consultant and BPS IT Officer waited for the response of SYSTEMA. In an inspection made by ECA Consultant on the supplier together with the BPS IT Officer, SYSTEMA's Mr. Albert Sun has expressed to the BPS IT Officer that he was instructed by their President to focus on the EU compared to the EMERGE request. This has prompted the BPS IT Officer and the EMERGE

Consultant to recommend a meeting to be held between EMERGE and the ECA-EU recommended supplier to discuss the importance of the EMERGE request as well as to possibly discuss other issues concerning the Single Supplier Option.

Meeting with the EU Recommended Supplier – SYSTEMA and EMERGE

A meeting was held at the EMERGE headquarters on October 25, 2006. During the meeting, SYSTEMA President Mr. Troy Borja expressed their analysis of the overlapping features on both portals and articulated the same set of situations that were presented by EMERGE IT Consultant on previous meetings prompting EMERGE to consider the Single Supplier option.

During the meeting, it has also been expressed that the situation may already need a Donor-to-Donor discussion to resolve the concern. Several issues have been expressed which includes:

- a. Who actually funds what feature/s
- b. Whose hardware will eventually be used

After the meeting, Dr. Myrna Austria has expressed her thought over if the Product (Joomla) and SYSTEMA being capable of handling the requirements of the S&C Portal. EMERGE Consultant in clarifying the situation over use of products in applications development submitted the discussion below to Dr. Myrna Austria

Applications Development

In any applications development effort there are several schemes, which we could see. On one end of the spectrum is what we call Development from Scratch, where the whole application is developed from ground-up, on the other end of the spectrum is Customization/Enhancement of existing Application Package.



Development from Scratch	Customization/Enhancement of Existing Application Package
Development from scratch often times encounters problems on reliability and robustness. If given longer time (like months after completing the application) to test the application this can be addressed and corrected.	Typically, application packages have been tried and tested by several companies/individuals/group of individuals. This implies that the reliability of the application has some level of assurance.
<p>The bigger the scope of the application, the longer it takes for the development from scratch.</p> <p>Development time in applications development can be reduced should there be ready and usable components that could be reprogrammed to fit the application.</p> <p>Development time also is factored by the expertise of the supplier's developers on the development tool they will use. Some developers can implement a feature in a matter of days; some will have a hard time developing it even already for a month.</p>	Development time usually takes a shorter time since most of the features have already been developed. Some features may also be readily available.
Can be fully customizable down to the each feature and functionality the client wanted since there is full control over all the programs.	<p>Can also be customized if supplier is abreast with the package. Even if customization is done, not all the features/functionality that the client wants can be implemented since there is a constraint over which the package was originally designed and implemented.</p> <p>This is the reason why package suppliers will always emphasized the word ACCEPTABLE rather than completely subscribing to the features/functionalties wanted by the client. Pushing features/functionalties demanding heavy customization demands</p>

	<p>more development time.</p> <p>In any development with an existing package, there is always what we call NEGOTIATING of feature/functionality activity where we balance the feature/functionality wanted by the client with the available feature/functionality offered by the package.</p> <p>This is also one reason why is development using an existing package, incremental prototypes and sessions with the clients are done to show and negotiate on features/functionality.</p>
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If the application is heavily business-centric, following complex business rules, transactional rules, computations, business models and the like, we go for development from scratch since covering these things are very organization specific and may not have been covered in the design of an existing package. If the application is general and tool-based in nature, with generally universal rules, not concentrated on transactional, computational and models to implement, we go for packages.

The case of the S&C and the WTO-TBT portal is a candidate for development using existing package. In the question whether JOOMLA can handle all our features, it may handle it but more the question should be what among our list of features in the TOR and some details of the functions drafted can be NEGOTIABLE. Given the limited development time to roll the project, there may also be constraints to do the project using development from scratch.

Appendix J: Assessment on Single Supplier Option

EMERGE Technical Assistance Program

The meeting with SYSTEMA Computer Solutions Corp was held last October 5, 2006 at the BPS Conference Room B. Mr. Oliver Malabanan for EMERGE, Mr. Joel Ryan Estares for BPS and Mr. Albert Sun for SYSTEMA attended the meeting. SYSTEMA was briefed about the BPS Standards and Conformance Portal and the principles it subscribes, to allow SYSTEMA to understand the features of the S&C Portal. SYSTEMA was likewise briefed with the SINGLE SUPPLIER OPTION and the role of EMERGE in the S&C Portal Project. Furthermore, Mr. Sun was informed that in no way that the meeting and the evaluation that EMERGE and BPS will be doing for the SINGLE SUPPLIER OPTION will affect the selection of supplier for the EU supported portal. SYSTEMA also expressed agreeing with the SINGLE SUPPLIER OPTION to reduce development risks involved with two separate suppliers. Indeed, the SINGLE SUPPLIER OPTION will mean reduced development time, consistent platform and single technological architecture for BPS.

After the S&C Portal briefing, discussion of the key features and technological innovations required of the S&C Portal was discussed. Emphasis was given on the following:

- Development of a BPS Central Database and the migration of the initial set of data into the S&C portal
- Development of primary portal features to support the internal process of collection, organization and storage of information and content needed for the S&C Portal
- Development of the Portal features for external users (e.g. stakeholders, clients)

SYSTEMA on the other hand presented their company profile and their portfolio of customers and partners. With an eGovernance Application Architecture on hand, SYSTEMA has a prepared set of technological solutions for government, based on typical solutions needed for a government portal. For the S&C Portal, Mr. Sun also gives suggested application solutions (e.g. JOOMLA for Content Management, Document Management System for document solutions) they carry which he thinks will be used during development. The concern over having two separate home interface for the EU and EMERGE was also discussed. SYSTEMA was informed that they are expected to develop two separate home interfaces: One for EU's Portal and one for the S&C Portal.

Mr. Sun was informed during the meeting that the process is still in the evaluation stage and recommendations to the SINGLE SUPPLIER OPTION is still to be drafted and submitted to BPS and EMERGE. The meeting and the activities that will be conducted after the meeting is still part of information gathering efforts that will help EMERGE and BPS consider the SINGLE SUPPLIER OPTION. In order for this recommendation to be drafted and the evaluation of the option started, EMERGE Consultant requested for information to SYSTEMA. The list of features expected of the S&C Portal as presented, the ANNEX A of the EMERGE TOR and the feature set for the users of the S&C Portal were submitted to SYSTEMA in order for them to prepare response to EMERGE request for information. Part of the information requested to SYSTEMA is their estimate cost for the development of the S&C Portal as well as their estimate time frame for the completion of the project.

SYSTEMA insisted on the budget allotted for the S&C Portal Project but EMERGE insisted that it works by getting estimates from the target supplier and use that as part of its evaluation and selection process. SYSTEMA also brought up their concern if a bidding will take place, EMERGE responded that this is a possibility but it still depends on the recommendations that the EMERGE Consultant together with the BPS IT Officer will make, coupled with the approval of EMERGE.

The project was also discussed to be completed in a 5-month period not exceeding the month of March. Even if the project will run until May, EMERGE Consultant feels that putting this constraint to March on the SINGLE SUPPLIER OPTION will give the project some two months of buffer period in case of any untoward events during the development of the Portal. The tight development time was acceptable to SYSTEMA and informed us that if ever the project pushes through, they have options to go on a 24-hour development time effort if needed. We also emphasized that through their response to our request for information, adjustments could be made to have the development period flowed even up to the month of April.

Assessment and Consultant Recommendation

Based on the discussions during the meeting, SYSTEMA showed confidence that they could build the S&C Portal even with the tight development period pronounced. It also shows during the meeting that given the features discussed, SYSTEMA is ready with a portfolio of applications that they will incorporate and customize for the S&C Portal. Their experience with building solutions for several companies as well as some government agencies makes them a good supplier candidate. Their technological platform (Java) is cost-effective but stable. Their ready portfolio of applications is a sign that development will not be done from scratch and their pronouncement of able to build the S&C Portal in five months is possible.

Particular investigation may be needed in order to assess capability of manpower to deliver within the 5-month period noting that SYSTEMA only have at this time, 10 developers.

Consultant though sees as a big challenge the possible coordination effort that will be required between EMERGE Consultant and SYSTEMA. The methodology of SYSTEMA may affect the deliverables of the EMERGE Consultant on the design document. The technology solution portfolio of SYSTEMA has to be considered on the design.

Appendix K: The EMERGE-EU Overlap of Assistance

EMERGE Technical Assistance Program

Initial Items of Concerns: A Report to EMERGE-USAID on the initial items of concern surrounding the overlap of portal initiatives of ECA-EU and EMERGE-USAID supported Portals. This report is being submitted to EMERGE as requested by Dr. Myrna Austria, Team Leader for Trade and Investments Group to act as input document to the possible meeting to be held with Director Motoomull and Dr. Ramon Clarete over the concern on overlapping initiatives of ECA-EU and EMERGE-USAID.

EXTREMELY CONFIDENTIAL

Based on the features that were shown to me by Ryan Estares, the S&C Portal of EMERGE has a bigger scope than that of the TBT Notification and Exports Alert supported by EU. Even with differences in system functionalities, the two systems share the same base functionalities.

Problem with the existing TOR of EMERGE

1. The functionalities are very open to different interpretations. Interpretations on the functionalities are not in the TOR. This has caused several expectations on what the S&C Portal will be.
2. It is only now that we are seeing detailed functionalities that I myself cannot interpret if part of the TOR or not.

Example:

- o AT5 (Certification Division) was expecting that the system they are currently using to manage their records would be replaced by the Portal. This is not in the TOR, but the open functionality mentioned can be interpreted to cover this.
 - o AT7 (Information Services) was expecting that the Portal would help them in their library work. Library System is not part of TOR only the Catalog of PNS, but the open functionality mentioned can be interpreted to cover this.
3. But looking at the essence of the TOR, we have to concentrate on features directly to Exporters, but analysis will tell us that these features might be simple because data is beyond BPS. It will all be a collection of links effort and managing these recorded links.
 4. Ryan Estares has written ANNEX A, he might have some expectations of the functionalities that were not written in the TOR.

Splitting of the Functionality of the Systems

1. What functions to split between the two supporting agencies? The functions of the EU Portal are all in the S&C and the remaining functions are not that many and may not even be feasible at the current situation (e.g. Payment, Web Store, etc.), some are even simpler (ICC holders, PS holders which will just be extracted from an existing system)
2. Even with splitting the functionalities, the two systems are in just one Portal.
3. They share the same foundational elements – database, records management functions.
4. Each AT has a need, we can look into these but they may not be directly for EXPORTERS.

On the option to remove the TBT and Exports Alert system for EMERGE

1. The stakeholders in EMERGE are all from the exports sector, removing the TBT and Exports Alert System seems to be removing the very essence of the EMERGE project
2. Both projects have the same stakeholders, what will they say? What happens to the EMERGE S&C Portal? Now becoming an S&C Portal primarily for non-exporters.

On the option of having one supplier

Preferred option but:

1. Definitely the supplier will have to start their phase1 together with what is being done now by EMERGE in order for them to complete the set of functionalities for both supported projects.
 - o How will EMERGE consultant interact with them and visa-versa?
 - o The supplier will definitely perform a separate method, how will BPS react to that?
 - o Are we going to share information? Definitely this will not be avoided since base systems are the same.
2. Are they capable of developing the functionality of the EMERGE S&C Portal given the limits of development time?
3. Granting that they are capable, who will now be at the front page of the Portal? EMERGE-USAID or EU?

On the option of EMERGE do PHASE1 and output be given to EU Supplier, EMERGE will not do PHASE2

Preferred option but:

1. EU Supplier will be coming by around October, what happens now between October and December? The EU supplier will now be performing their own analysis and design at the same time. And I will not be surprise if the method they will use is incremental prototyping method to speed up development of the Portal. What happens now to our PHASE1 of EMERGE?
2. If EMERGE will not do PHASE2, the TOR of EU does not cover the functionalities of the S&C. It will not be favorable for BPS

Appendix L: Division of Assistance for EMERGE and ECA

EMERGE Technical Assistance Program

This document gives a general view of the BPS Portal and the division of scope of technical assistance between EMERGE and ECA. This division has been discussed thoroughly with EMERGE as well as with ECA during the Donors Meeting with BPS. As a general division of scope, this does not show the detailed coverage of the work that EMERGE and ECA will be independently funding.

The BPS Portal

In the pursuit of the objectives of having the BPS Portal, EMERGE through its technical assistance have identified seven (7) Major systems, these are:

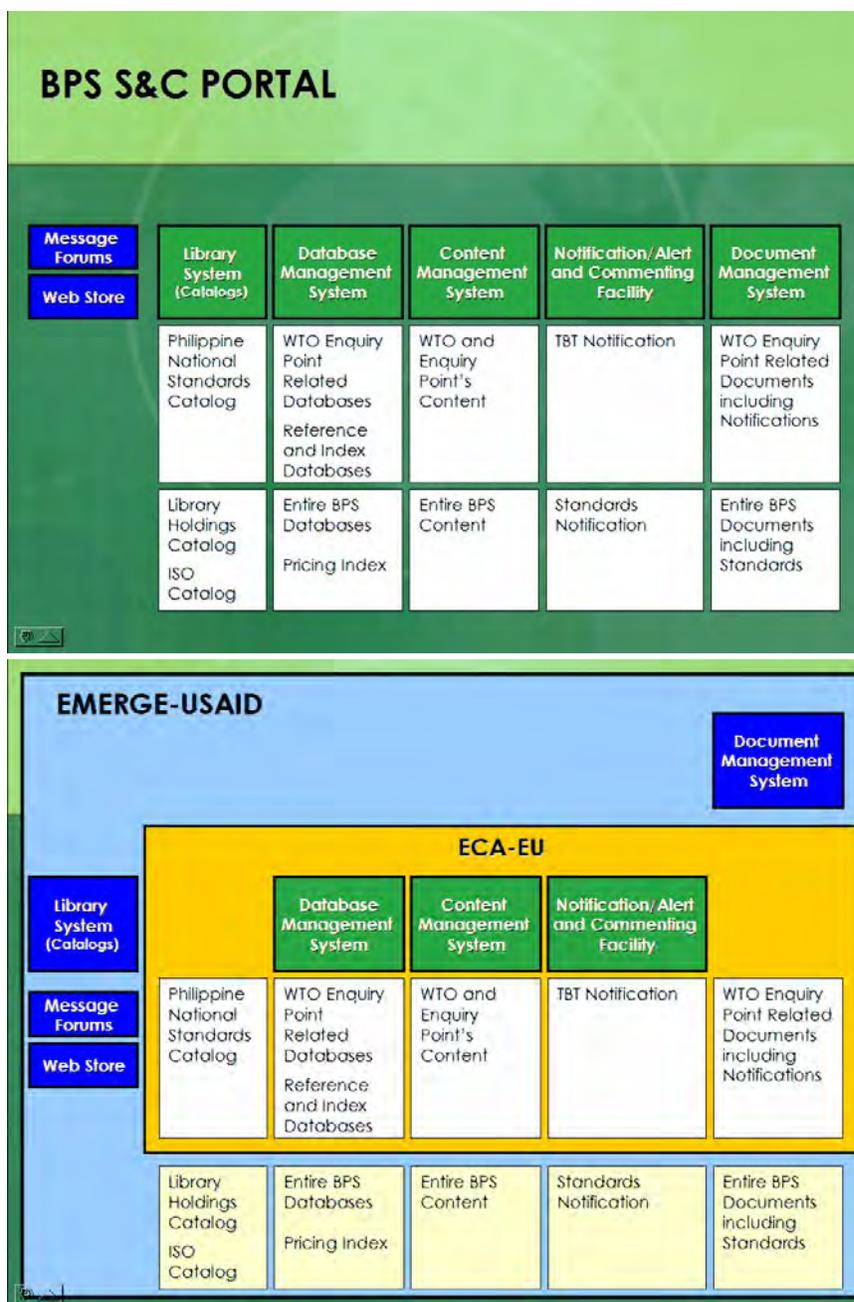
- Content Management System
- Database Management System
- Notification/Alert and Commenting Facility
- Library System
- Document Management System
- Message Forums
- Web Store

These systems will remain empty systems without contents, data and documents that will be loaded into these systems (indicated in white boxes). Analyzing the ECA Terms of Reference and the scope of the assistance particularly in building a WTO-TBT Notification and Alert Portal, EMERGE was able to identify three (3) out of the seven (7) identified major systems to be important in order to implement the WTO-TBT Portal. These are:

- Content Management System
- Database Management System
- Notification/Alert and Commenting Facility

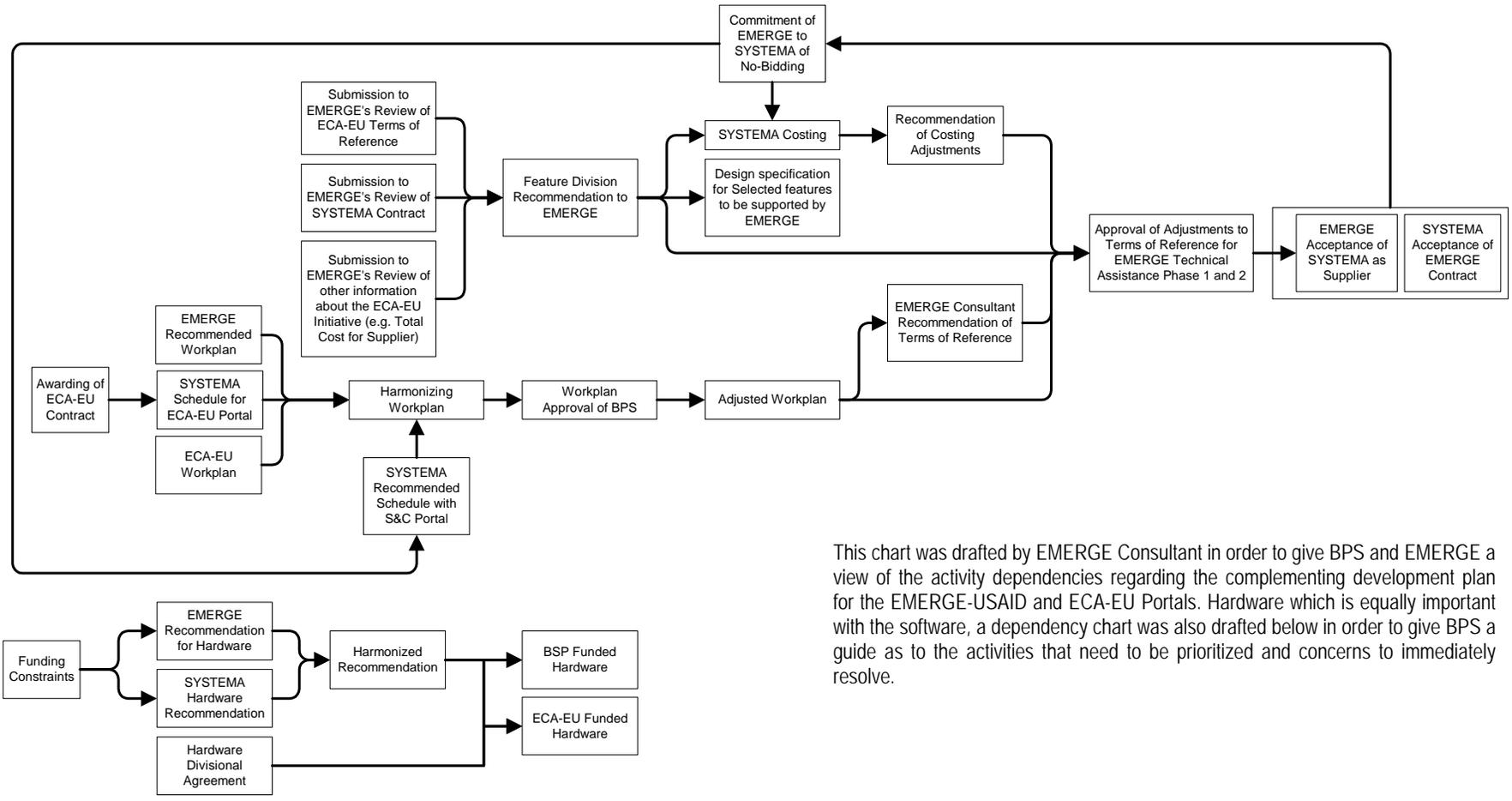
Covering the documents, data and content specified and inherent to running the WTO-TBT Notification Portal, the division was identified such that:

ECA will be funding the systems enumerated above as well as the necessary processing of content, data and documents for the initial build-up of the WTO-TBT Notification Portal (indicated in white boxes on the right). The remaining systems and the remaining content, data and documents to complete the BPS Portal will all be funded by EMERGE.

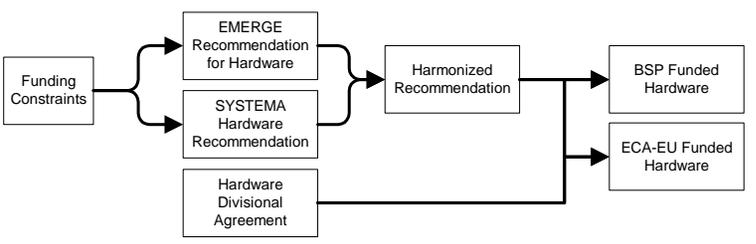


Appendix M: Activity Dependency Chart

EMERGE Technical Assistance Program



This chart was drafted by EMERGE Consultant in order to give BPS and EMERGE a view of the activity dependencies regarding the complementing development plan for the EMERGE-USAID and ECA-EU Portals. Hardware which is equally important with the software, a dependency chart was also drafted below in order to give BPS a guide as to the activities that need to be prioritized and concerns to immediately resolve.



Appendix N: Meeting Report on Donors Meeting

EMERGE Technical Assistance Program

A Donors Meeting was held at the BPS Conference Room on November 30, 2006. Attending for EMERGE are Dr. Ramon Clarete, Technical Director and Dr. Myrna Austria, Trade and Investments Team Leader; attending for ECA is Dr. Romeo Reyes, Team Leader for TRTA. Director Motoomull expressed the importance of the complementary arrangement of both donors for the establishment of the BPS Portal. During the meeting, it was emphasized that one of the objectives of the meeting was to establish a clear understanding on the assistance extension of each donor to the BPS Portal.

The Portal being a 24x7 Virtual BPS Office

The BPS Portal being in a web environment offers availability of information to various individuals and businesses with stake on Product Standards and Conformance. The availability of this information is no doubt offered at a 24x7 mode. It must be emphasized that the Portal's framework was set to deliver 24x7 information services rather than delivering human-led services like testing, consultations and inquiries (the portal though may collect inquiries which BPS could process during regular office hours).

A Virtual BPS Office should not be misunderstood to reflect all BPS services to be available 24x7 and all transactions completely supported in the Portal. The Portal's framework and the systems identified for implementation was not based on the objective of a Virtual Office. Although the environment in which data, documents and content are managed is the Internet, configuring the whole system to be accessible by BPS Staff outside the domains of the BPS Office may be considered as an initial attempt to a virtual office.

With a 24x7 facility, particular demands are being posed to BPS in terms of their ability to do the following:

- a. Regular up-to-date content
- b. Proactively answering possible questions to be raised regarding Standards and Conformance
- c. Research and Collection of relevant external resources and linking it to the Portal
- d. Process and answer inquiries and comments
- e. Transform exchanges in the Message Forum and other facilities to useful additional information in the Portal

Regular up-to-date content

The regular update of content in the portal has been emphasized in the meeting with the BPS Portal Working Group as a critical success factor that will identify the life and death of the BPS Portal. In order to ensure that the portal will not become an idle, lifeless portal, content must be regularly added, created and published in the portal. The following measures were already suggested to be taken by BPS:

- a. Institutionalize the establishment of a Publication Plan
Included in the establishment of a Publication Plan is the activation of the Newsletter per Division that was originally planned by BPS. Concern over the ability of BPS to publish content has also been raised by the BPS IT Officer following his experiences over the updating of content in their current website. A document has already been sent to Ms. Victoria Campomanes regarding the importance of this Publication Plan and the urgency of this plan to be institutionalized and discussed in the BPS Executive Committee for immediate implementation.
- b. Manage current manpower resources to ensure that there will be personnel for Data, Document and Content Management, Research and Content Creation
Even with a publication plan, the lack of manpower still poses a risk that the plan will not be implemented as expected leaving the portal with content and resources seen as obsolete, old and not sensitive to the information needs of the stakeholders.

Proactively answering possible questions to be raised regarding Standards and Conformance Research and Collection of relevant external resources and linking it to the Portal

Another success factor for the BPS Portal is the proactive identification of questions and proactive searching for answers by BPS. Inherent to this is the ability of BPS to organize gathered resources and publishing them in the portal. Resources (whether these are links, documents, websites, etc), external to BPS is a priority for the WTO Enquiry Point and Services to gather and organize. Without proactive and regular researching of useful resources that will be linked to the Portal, the portal cannot serve its purpose. The portal heavily lies on the information that will be gathered, researched and published by the WTO Enquiry Point. With the lack of manpower, we are projecting the risk of the portal not being able to have adequate resources for the public and the stakeholders.

EMERGE Consultant is suggesting the following measure to be taken immediately by the BPS WTO Enquiry Point:

- a. Draft a feasibility study in increasing the services and the manpower capacity of the WTO Enquiry Point.
- b. Draft a Sustainability Plan that will help cover for the incurring cost of expanding the WTO Enquiry Point.
The sale of Standards has been identified as one of the means to sustain the cost of operating the Portal. In the assessment of the EMERGE Consultant, this may not be enough to shoulder the needed capacity expansion of the WTO Enquiry Point. Aside from Standards sales, Assistance Service to Exporters was also identified. Although identified, there are no concrete business feasibility documents available which may raise uncertainty as to the ability of this service to pay off possible costs. Sustainability is an important concern not only for the portal but also to cost of keeping the National Committee on TBT.
- c. Explore funding opportunities to assist in the establishment of the planned expansion and services for the first year of implementation

Process and answer inquiries and comments

Aside from the content, document and data management functions that BPS needs to perform for the portal, the organization's ability to respond to posted inquiries and comments is equally important. At this point, BPS has a process in place to process these inquiries and comments but concern over the speed of response remains. With the portal in place, it is expected that inquiries and comments will increase, posing a demand of time for BPS staff to respond. This also is a factor of the number of manpower resources available in BPS.

Transform exchanges in the Message Forum and other facilities to useful additional information in the Portal

As has been identified, the Message Forum not only a feature suggested by the stakeholders is an important facility to forge an active community of stakeholders exchanging ideas and concerns about Standards and Conformance. As a facility whose existence is driven by the stakeholders, it does not suggest less responsibility for BPS but rather an additional responsibility for BPS. The forum will generate exchanges and these exchanges needs to be moderated and to some extent be evaluated and transformed to additional useful content (or at the very least drive the creation of new content). The organization, usefulness and accuracy of forum exchanges are dependent on BPS' ability to keep order and answer concerns in the forum.

Opinions

It has been expressed in several occasions that the ideals of the Portal are commendatory but it poses demands on BPS which as an organization (based on manpower capacity), BPS may not be ready. Even with the portal facilities in place, the success of the portal lies not on its feature but rather on the content being published and made available. Personnel may be trained increasing their skill and capacity to operate the features of the Portal but content and resource publication is a human-extensive effort and technology only assists in its creation and organization. Without effort to search and evaluate useful resources of public interest, the portal becomes a lifeless repository.

Appendix O: Build-up Structure of the Standards and Conformance Portal

EMERGE Technical Assistance Program

The site structure proposed for the Standards and Conformance Portal allows portal contents, databases and documents to be browsed by the user in a pre-defined organization. This document has been used during meetings with SYSTEMA, BPS, ECA and EMERGE as reference to the division and extent of scope of work for the supplier.

There are three main organization of content, databases, and documents proposed, these are:

- By BPS Services (Default Organization)
- By Product
- By Type of Audience

Main Sections:

By Product	By Type of Portal User
<p><u>For All Users</u></p> <ul style="list-style-type: none"> • BPS and its Services • WTO Enquiry Point and Services • Library and Information Center • Trainings • BPS News • Calendar of Events • Notices and Announcements • Comments and Complaints • Downloadable Forms and Documents • Web Store • Search • Site Map • Register and Login • By Product • By Type of Audience 	<p><u>For Registered Users</u></p> <ul style="list-style-type: none"> • My S&C • Message Forums • Web Store • Submit Contribution to BPS • Manage Subscriptions <p><u>For BPS and its partners</u></p> <ul style="list-style-type: none"> • Document Repository • Database Records Management • Comments and Complaints Processing • Notification and Alert Management • Contributions Management • Web Store Management <ul style="list-style-type: none"> - Order Processing • Mass Mailer Administration • Library Management • Administration
<ul style="list-style-type: none"> • News involving the Product • TBT Notifications • Philippine National Standards • Foreign Standards and Technical Regulations • Products under Mandatory Certification • List of Accredited Laboratories • Listed Laboratories to Philippines under ASEAN Electrical and Electronic MRA 	<p><u>Businessman</u></p> <ul style="list-style-type: none"> • Foreign Products to the Philippines <ul style="list-style-type: none"> - Exporting to the Philippines: General Information - Philippine National Standards - Products under Mandatory Certification - ICC and PS Certification Information - Existing Alliances on Certification and Product Testing • Locally Manufactured Products to Foreign Countries <ul style="list-style-type: none"> - Exporting Philippine Manufactured Products to Foreign Countries: General Information - Foreign Standards and Technical Regulations - WTO Contact Points - TBT Notifications - Existing Alliances on Certification and Product Testing - List Of Accredited Certifying Bodies (Accredited Quality Assessment Bodies) <p><u>Researcher and Academe</u></p> <ul style="list-style-type: none"> • BPS Information Center <p><u>National Standards Body</u></p> <ul style="list-style-type: none"> • Local Contact Points

	<ul style="list-style-type: none"> Philippine National Standards Submit to BPS copies of standards for PNS Adoption
WTO Enquiry Point	Section devoted to content and other subsections to introduce the WTO-TBT Enquiry Point and Services
<ul style="list-style-type: none"> News from WTO Enquiry Point About WTO and the Philippines Enquiry Point Directory of Contact Points TBT Notifications <ul style="list-style-type: none"> TBT Notification Alert Service Foreign Standards and Technical Regulations Downloadable Forms and Documents FAQ's on WTO Enquiry Point 	Content Content Online Database Online Database Notification Alert Feature Online Database Publicly-made available documents Content
Library and Information Center	
<ul style="list-style-type: none"> Library Holdings Standards Catalogue ISO Standards Catalogue Foreign Standards and Regulations Reference Database <ul style="list-style-type: none"> Industries Industry Associations ICS Index and Matrix Company Database Search the Library 	Online Database Online Database Online Database Online Database Online Database Online Database Online Database Online Database
MyS&C	
<ul style="list-style-type: none"> Personal Profile <ul style="list-style-type: none"> Log-in Information Personal and Corporate Information Industry Profile Industry Associations Contact Points Product Profile <ul style="list-style-type: none"> My Products Upload Product List Product Index Manufacturing Plants My Settings My ICC and PS License ISO Certification 	Database-driven, user-supplied Database-driven, user-supplied Database-driven, user-supplied Database-driven, user-supplied Database-driven, user-supplied Database-driven, user-supplied Database-driven, user-supplied Online Database Database-driven, user-supplied (For Discussion)
Web Store	
<ul style="list-style-type: none"> Catalogue of Products Order for Products My Orders 	Online Database
BPS and its Services	
About BPS	Section devoted to content and other subsections to introduce BPS

BPS @ Work	Section devoted to content and other subsections to introduce the different divisions of BPS
<u>Standards Development</u> <ul style="list-style-type: none"> - News from Standards Development - About the Standards Development Program - Standards Catalogue and Technical Committees - Draft Philippine National Standards <ul style="list-style-type: none"> • Standards Alert Service - Downloadable Forms and Documents - FAQ's on Standards Development 	Section devoted to content and other subsections to introduce the Standards Development Program <ul style="list-style-type: none"> Content Content Online Database Online Database Notification Alert Feature Publicly-made available documents Content
<u>WTO Enquiry Point</u> <ul style="list-style-type: none"> - News from WTO Enquiry Point - About WTO and the Philippines Enquiry Point - Directory of Contact Points - TBT Notifications <ul style="list-style-type: none"> • TBT Notification Alert Service - Foreign Standards and Technical Regulations - Downloadable Forms and Documents - FAQ's on WTO Enquiry Point 	Section devoted to content and other subsections to introduce the WTO-TBT Enquiry Point and Services <ul style="list-style-type: none"> Content Content Online Database Online Database Notification Alert Feature Online Database Publicly-made available documents Content
<u>Product Certifications and Testing Services</u> <ul style="list-style-type: none"> - News from Certification and Testing Services - About the BPS Certification Program - ICC and PS Information - Procedures and Guidelines on Certification - Testing Services <ul style="list-style-type: none"> • Include information on cost • Information on scope of testing capability - Products under Mandatory Certification - PS and ICC License Holders - Recognized Laboratories - Downloadable Forms and Documents - FAQ's on Product Certifications & Testing Services 	Section devoted to content and other subsections to introduce the BPS Product Certification and Testing Services <ul style="list-style-type: none"> Content Content Content Content Content Online Database Online Database Online Database Publicly-made available documents Content
<u>Promotion and Media Relations</u> <ul style="list-style-type: none"> - Promotion and Media Relations Activities - BPS Newsletter <ul style="list-style-type: none"> • Subscribe to BPS Newsletter - Downloadable Forms and Documents - FAQ's on Promotion and Media Relations 	Section devoted to content and other subsections to introduce the Promotion and Media Relations <ul style="list-style-type: none"> Content Collection of all News Published Subscription Facility Publicly-made available documents Content
<u>Enforcement and Consumer Assistance</u> <ul style="list-style-type: none"> - News from Enforcement and Consumer Assistance - Enforcement and Consumer Assistance Activities - Downloadable Forms and Documents - FAQ's on Enforcement and Consumer Assistance - Bantay Consumer 	Section devoted to content and other subsections to introduce the Enforcement and Consumer Assistance <ul style="list-style-type: none"> Content Content Publicly-made available documents Content Special facility for sending complaints, similar to sending regular complaints but directed to the division handling consumer complaints

<u>Registration of Assessors and Special Projects</u> - News and Activities - Procedures for Registration <ul style="list-style-type: none"> • Including Costs of Registration and Maintenance - Database of Registered Assessors - TQM Integration Program <ul style="list-style-type: none"> • List of Participating Companies • Procedure on How to Participate in the Program • Fees and Costs - Downloadable Forms and Documents	Content Content Content Online Database Content Publicly-made available documents
<u>International Relations</u> News and Activities Existing MRAs FAQ's on International Relations Downloadable Forms and Documents	Content Content Content Content Publicly-made available documents
<u>PETC Accreditation</u> About PETC and Accreditation Accredited PETCs FAQ's on PETC Accreditation Downloadable Forms and Documents	Content Content Online Database Content Publicly-made available documents
<u>Strategic Alliances</u> News and Activities involving Strategic Alliances Local Alliances Foreign Alliances	Content Content Online Database Online Database
<u>Quality Management Systems Certification</u> About Quality Management Systems Accredited Quality Assessment Bodies ISO 9000 and 14000 Certified Companies FAQ's on Quality Management System Certification Downloadable Forms and Documents	Content Content Online Database Online Database Content Publicly-made available documents
<u>Trainings</u> About BPS Trainings News and Training Activities Downloadable Forms and Documents Calendar of Training Events	Content Content Publicly-made available documents Calendar
Philippine Accreditation Office	Content For Discussion with Director Motoomull and Mrs. Botor

In the implementation of the Standards and Conformance Portal, the supplier will provide three Site Templates. These themes will allow BPS to switch look and feel of the portal easily and may be possibly be a feature that will also be available for all users (as part of a personalization effort).

Summary of items in the Portal to be funded by EMERGE

- a. Content Preparation*, Conversion*** and Migration to the Portal (excluding contents regarding TBT Notifications)
- b. Document Preparation*, Digitization**, Conversion and Migration to the Portal
- c. Database Preparation*, Conversion*** and Migration to the Portal (excluding those of TBT Database)

- d. Online Databases (excluding those of TBT Database)

Note: The Portal has 24 Databases and 18 out of these Databases are EMERGE.

1. Philippine National Standards (also known as Standards Catalog) (Only Draft Standards Database)
2. Technical Committees
3. Products Under Mandatory Certification
4. Laws and Regulations
5. PS and ICC License Holders
6. Accredited Laboratory and testing Centers (also known as Recognized Laboratories)
7. Company Products Database (Company specific products, variants and specifics)
8. Company Database (Only those from other Divisions)
9. ISO 9000 and 14000 Certified Companies
10. Accredited Assessors
11. Accredited PETCs
12. Local Alliances
13. Foreign Alliances
14. Accredited Quality Assessment Bodies
15. Product Pricing Code
16. Company Manufacturing Plants
17. Listed Laboratories to Philippines under ASEAN Electrical and Electronic MRA
18. Library Holdings and Catalogs

- e. Standard Alert and Notification System
- f. Library System
- g. Web Store
- h. Message Board
- i. Document Management System

* Content, Document and Database Preparation refer to activities concerning creation, editing, inventory, cataloging, and indexing.

** Document Digitization is the conversion of non-electronic documents to electronic format (PDF)

*** Content, Document and Database Conversion refer to activities concerning the formatting, file naming, merging, and any transformations needed in preparation for migration to the Portal

Features and Functionality Document

EMERGE Technical Assistance Program

CONTENT MANAGEMENT SYSTEM

User Capability	Administrator Capability related	User Notice Mechanisms	User Notice Visible to
<p>CONTENT CREATION</p> <ul style="list-style-type: none"> • Create content using a Microsoft Word-like facility • Choose a content layout • Choose styles to format content • Choose picture from picture gallery or from local workstation (choosing picture from local workstation automatically transfers picture from local workstation to the document management folder defined for user images) • Choose reference document (from the document management folder) of the content to be available for download • Select type of content • Select section/subsection (only available to the author) to publish content • Add links to selected words/terms. • (When adding links, author may opt to type a specific URL, or specific person's contact information in the contacts database or search through the portal for content they want to link to) • Define life of content (start and end date of publication) • Define target groups of content (Target groups may already have been created using the contacts manager of the portal) <ul style="list-style-type: none"> • Define if content be emailed as notice to target groups identified • Define email write-up for notice • Define if content will require commenting facility • Define keywords for content • Define appropriate index fields for content (When defining index values, author must be able to browse through the index and select appropriate index to use) • Define related content (When defining related content, author may search for published-active content and 	<ul style="list-style-type: none"> • Setting authority to division members who will create and approve content • Define Content Layout to be made available to content authors • Define Style Formats • Set the directory for uploaded images of each user • Setup different types of content • Setup sections and subsections • Setup sections and subsections that divisions can post content • Setup default content life • Setup default contact groups and members of the group (e.g. BPS Execom, Export Council Members, etc.) • Manage Index Databases • Upload approval sheet document • Setup approving people for content 	<ul style="list-style-type: none"> • Newly created content • Content submitted for review and approval • New content for Library Holdings 	<p>Author Reviewer Division Head Administrator</p> <p>BPS Librarian</p>

<ul style="list-style-type: none"> select them as related content) Define content as part of Library Holdings Preview content (When previewing content, list of related content defined by the author should appear as well as the top 5 other contents that the system sees as related using the Index supplied in the content) Print content Download and print content approval sheet Submit content for review and approval 			
<p>Content Review</p> <ul style="list-style-type: none"> View content for review Edit content being reviewed side by side with original content submitted for review (Editing uses the same functions available with content creation) Add comments using a tag (e.g. **) (Comments are not visible when previewing content and the published version of the content, comments are only to facilitate reviewing and revising content) Send reviewed content back to author <p>Content Review may be done manually. Content author may opt to print the content and submits printed content with approval sheet for review and approval. Once this method is chosen, content review is done manually but content revision is done through the portal. Approval of the content is done by the BPS IT Officer and will need the printed content and the approval sheet to publish</p>	<p>1. Define default maximum days for content to be reviewed. This is going to be used to alarm reviewers of their pending content for review</p>	<ul style="list-style-type: none"> Reviewed content for revisions 	<p>Author Reviewer Division Head Administrator</p>
<p>Content Revision</p> <ul style="list-style-type: none"> View reviewed content and comments Edit content side by side with reviewed content with comments (Editing uses the same functions available with content creation) Send revised comment back to reviewer 	<p>2. Define default maximum days for content to be revised from last review. This is going to be used to alarm content authors of their pending content revision</p>	<ul style="list-style-type: none"> Content submitted for review and approval 	<p>Author Reviewer Division Head Administrator</p>
<p>Content Approval</p> <ul style="list-style-type: none"> View reviewed content and comments <u>Approve content</u> It may be necessary that on the approval stage, some parts of the content needs final touches. BPS IT Officer may make necessary final adjustments to the content. 	<p>3. Define default maximum days for content to be approved</p>	<p>4. Content submitted for review and approval</p>	<p>Author Reviewer Division Head Administrator</p>
<p>Content Publication</p> <ul style="list-style-type: none"> View content 	<p>(The following are also available to author, division)</p>	<ul style="list-style-type: none"> New contents 	<p>All Users Target Users</p>

<ul style="list-style-type: none"> • Make comments (only available for registered users) <ul style="list-style-type: none"> • Content is previewed and a comment facility is provided below the content • An upload a comment document is also provided • Make value review 	<ul style="list-style-type: none"> • View content value rating • View hit rates of the content • View comments made on the content • Download compiled comments into a word document 	<ul style="list-style-type: none"> • New Comment on Content 	<p>Author Division Head</p>
<p>Content Retraction</p> <ul style="list-style-type: none"> • Author sets content as retracted • Provide reasons for retraction 	<ul style="list-style-type: none"> • View retracted contents and reasons for retraction 	<ul style="list-style-type: none"> • Retracted contents and reasons for retraction 	<p>Author Division Head Administrator</p>
<p>Content Archival</p> <ul style="list-style-type: none"> • View all active contents and age life of contents • Select contents that will be archived • Define if documents attached and other related data will also be archived together with content • Sent selected content for archival <p>BPS IT Officer is in-charge of archiving contents. Divisions and staff have the option to select which content they want to archive</p> <p>Archived content may still be searched by BPS but will only display "In Archives" and the archive details. User may opt to request for the archived content using the details provided through the BPS IT Officer. Users can use this facility to browse through the archived items/contents.</p> <p>Administrator must be able to select or set period by which the system can automatically consolidate all contents to be archived.</p>	<ul style="list-style-type: none"> • Define default age of content for archival • Define size of archival target • Define sequence of DVD archive IDs • View contents beyond age for archival • View contents for archival (user selected) • Define archival folder and DVD catalog details • Archive contents • View DVD Catalog and archive titles (content may no longer be viewed but may be retrieved from actual DVD using the catalog details recorded like DVD ID, filename, cabinet location) 		
<p>Build-up Requirements for Supplier</p>			
<ul style="list-style-type: none"> • Conversion and migration of existing content to the new Portal 			

Contents will be collected and stored for years. It is imperative that some contents needs to be archived in a permanent medium (which is recommended to be DVD). Although some contents are archived, it is important that access to the archive is provided and contents can be requested to from the archive. Contents that have been published in the Portal when archived will be pulled out of the portal.

Selection Process

Selection of contents for archival is recommended to follow any of the following:

- a. By content age
- b. As selected by the division

By default, contents are archived based on content age. This content age can be configured using the Administration Tool. Archiving is not done automatically. The portal alerts divisions about their content that have been identified by the system for archiving due to its age. Contents may be selected by the division for archival. These content when identified and confirmed will not anymore be part of active contents.

On confirmation of the division, these contents automatically will not be part of active contents. When contents have been division-confirmed for archiving, the system prepares folders to which to-be archived contents are moved. Contents are properly organized on these folders given the size of the DVD to which it will be transferred.

Transfer of Documents to Permanent Storage

Selected contents for archival is temporarily moved to a temporary storage until it reaches the size for transfer to DVD. This allows optimization of DVD storage rather than a method of archival by period. Since DVD and archived contents are catalogued, access to the archives can be supported.

Archive Catalog Sub-System

An archive catalog sub-system is used by the Portal Administrator to manage contents to be archived to DVDs as well as DVDs that contains archived contents. The catalog also is in-charge of creating and managing temporary folders to which to-be archived contents are moved.

The Portal Administrator should be able to monitor the following:

- a. Temporary Folders that reached its size limit. When temporary folders have already reached its size limit and are already ready for DVD writing, the catalog automatically generates DVD IDs that will be used to tag DVD Discs. DVD Writing is done manually using commercial DVD Burning application. Portal Administrator has access to the folders and the contents it contain using the server's file explorer.
- b. Temporary Folders that have been already transferred to DVD. When contents of temporary folders have been transferred to DVD, the contents are not automatically deleted. Portal Administrator has the option to delete these files from the storage. DVD details to which the contents were transferred are also properly recorded in the catalog.
- c. Archive DVDs and the contents it contains and on what cabinet it is located

ONLINE DATABASE AND DATA MANAGEMENT FUNCTIONS

Database

Publish Selected
Records
Export to Worksheet
Import from Worksheet

Reports

List of Reports Available
Saved Reports

Search

User Capability	Administrator Capability related	User Notice Mechanisms	User Notice Visible to
<ul style="list-style-type: none"> Add, delete and modification of records in the database including related records on the same divisional database <p><u>Notes on modifying records</u></p> <ul style="list-style-type: none"> By default, in modifying/deleting records, old values are kept until modified or deleted records are approved When modifying/deleting records already posted, a warning must be given to user Posted record remains to be using the old values until an approval of the modified/deleted record is given 	<p>5. Setting of fields on existing tables which cannot be modified or deleted</p> <p>6. Creation of additional fields on the same table</p>	<p>7. New records added or modified</p>	<p>Administrator Division</p>
<ul style="list-style-type: none"> Searching and browsing the records <p>Records can be sorted based on desired field and could do filtering based on certain field values (There should be a default listing of database records)</p> <p>When displaying record details, the list of related records from other databases should be shown at the end of the record details. (See List of Databases document for the specific related databases)</p> <p>Ability to search for specific records within the database</p>			
<ul style="list-style-type: none"> Searching and browsing related records of other databases <p>(relationships with other records means that they share the same index value, in searching for related records of other databases, the PNS or ICS Index is a priority relationship index)</p> <p>Records can be sorted based on desired field and could do filtering based on certain field values</p> <p>When searching, ability to indicate other databases which will be searched for related records. Since all records are indexed, use the index to relate records from other databases.</p> <p>When displaying for related records, a summary of</p>	<ul style="list-style-type: none"> Setting of databases which are open for other divisions 		

the total number of related records found should be displayed			
<ul style="list-style-type: none"> Keywording and indexing of records using the S&C index list to facilitate the searching and relationship of records coming from other databases 			
<ul style="list-style-type: none"> Attachment of documents from the document management system to serve as reference document to the record 			
<ul style="list-style-type: none"> Selection of records that will be posted in the website. (Posting of records in the website requires writing of a write-up to introduce the contents being posted using the content management system, the date of the last update of the records selected should appear on the write-up) 		8. New records for posting on website	Administrator Division
<ul style="list-style-type: none"> Exporting of all or selected records to Excel worksheet format (this serves as one of the ways that the database could be backed-up/archived or be used for report generation activity) <ul style="list-style-type: none"> Save to local hard drive Save to document repository 	<ul style="list-style-type: none"> To define location in document management system to save "saved" imported records 		
<ul style="list-style-type: none"> Importing of records from an Excel worksheet <ul style="list-style-type: none"> Download existing Excel Worksheet template Upload Excel Worksheet for importing records Report on non-successful importing of records Select action to non-successful importing of records (ignore, overwrite, etc.) Re-importing non-successful records 	<ul style="list-style-type: none"> To define Excel Worksheet template for importing records 		
<ul style="list-style-type: none"> Generation of canned reports using records or across records of other databases as identified by BPS <ul style="list-style-type: none"> Previewing generated reports Saving generated reports into document format Retrieving saved generated reports <p><u>Notes on generated reports</u> Reports that have been generated can be published using the content management system attaching the report</p>	<ul style="list-style-type: none"> To design new reports using records or across records of other databases To define divisions with access to reports To define location in document management system to save "saved" generated reports 	9. New records for posting on website	Administrator Division Public
Additional Administrator Capability			
<ul style="list-style-type: none"> Creation of new additional tables <ul style="list-style-type: none"> Creation of forms used to manage the records Assigning division to manage the tables Deleting/Deactivating tables and corresponding forms 			

- Deleting/Deactivating reports
- Modifying table structure and corresponding forms used for managing records
- Database fields could be selected that could be viewed by Public or selected users/group of users

Notes on modification/deletion of tables

Alert must be given on reports that will be affected over modification/deletion of tables. It is on the decision of the administrator whether to proceed or not. Proceeding with modification/deletion of tables results to deactivation of reports affected

Build-up Requirements for Supplier

- Design of the database tables suiting requirements for reports and data management
- Conversion of existing electronic files (in excel worksheet formats) to databases
- Conversion of existing non-electronic records into excel worksheet formats
- Conversion of document references of records to electronic format

ALERT AND NOTIFICATION SYSTEM

The Alert and Notification System is a facility where Divisions issuing alerts to identified people or groups of people could monitor the alert and notification sent as well as the comments being received from the notification. The facility is invoked from either a content or document in the document repository.

When documents/contents are sent for notification, technical committees or members of the network concerned with the notification could be selected and appropriately the content and document is copied to their respective portal document folders. Calendar entries to remind them of the deadline for comments will also be reflected on their shared calendars.

User Capability	Administrator Capability related	User Notice Mechanisms	User Notice Visible to
<ul style="list-style-type: none"> Choose Notification Write-up available 	10. Setup notification write-up		
<ul style="list-style-type: none"> Create a notification write-up using a word-like facility similar to what is being used in the creation of content in the content management system Created write-ups could be saved forming a collection of write-ups that could be used for other notifications 		New Notification	Administrator Division where notification is originating Target of Notification
<ul style="list-style-type: none"> Define affected products and country where notification originated 			
<ul style="list-style-type: none"> Define deadline for comments and other document reference for the issuance of comments 			
<ul style="list-style-type: none"> Select target of notification from the contacts database Users may select notifications that they can receive automatically based on products and country of origin 			
<ul style="list-style-type: none"> Preview notification to be sent together with the being notified document or content 			
<ul style="list-style-type: none"> Print notifications for snail mail distribution 			
<ul style="list-style-type: none"> Approval of Notification for Distribution (both snail mail and portal distribution) 			
<ul style="list-style-type: none"> Sending of Notification 			
<ul style="list-style-type: none"> Creation of comments and uploading of comment documents 		New Comments	Administrator Division issuing notification
<ul style="list-style-type: none"> Viewing of comments 			
<ul style="list-style-type: none"> Printing of consolidated comments 			
<ul style="list-style-type: none"> Uploading of Notification Results and Position Document 			
<ul style="list-style-type: none"> Retraction of Notification Notifications may be retracted due to possible errors on notification transmission. Reasons for retraction must be provided for monitoring purposes. Notification is not deleted but rather tagged as retracted. 		Retracted Notifications	Administrator Division issuing notification Target of notification

Deletion of notification happens on expiration of the original notification			
<ul style="list-style-type: none"> Closing the Notification <p>Closing the notification means that the notification is no longer available to the public as well as documents that were attached together with the notification</p>			
Build-up Requirements for Supplier			
<ul style="list-style-type: none"> Conversion and Migration of Existing Active Notifications 			
<ul style="list-style-type: none"> Migrate electronic documents to Document Repository 			
<ul style="list-style-type: none"> Index documents accordingly 			
Current Status of Documents			
Documents have electronic formats			

INFORMATION CENTER MANAGEMENT SYSTEM

The Information Center acts as an integrated area for Standards and Regulations and Library Holdings Catalogue that the public can browse to look for information resources about Standards and Conformance. The Information Center being managed by the Information Services Division is composed of several databases

Library Holdings	<ul style="list-style-type: none"> • Catalog of library materials like magazines, reports, publications, materials (content or documents) sent by division to be part of Library Holdings
Standards Catalogue	<ul style="list-style-type: none"> • Catalog of Philippine National Standards • Data on revisions, versions, official standard in use and for implementation are being maintained by the Standards Development and Product Certification using the online database provided.
ISO Standards Catalogue	<ul style="list-style-type: none"> • Catalog of ISO Standards available at the ISO.ORG website that Philippine users can order through BPS.
Foreign Standards and Regulations	<ul style="list-style-type: none"> • Catalog of links pointing to foreign standards and regulations, collected by BPS across several divisions
Reference Databases	<ul style="list-style-type: none"> • Catalog of Indexes used by BPS. This refers to the: <ul style="list-style-type: none"> ○ ICS Index and Matrix to other International Classification Standards ○ Industry Associations ○ Industries ○ Product and Product Variants

Library Holdings

In order to organize Library Holdings that will be made available in the Information Center, the portal should be able to provide the following basic functionalities:

- Materials Cataloging (typical library function of cataloging materials that could be for circulation)
- Setting up of portal availability of the materials and its corresponding reference electronic documents
- Costing of materials for reproduction of clients
- Facilitating Borrowing/Returning of materials (for internal circulation only)

Standards Catalogue

Since the database of Standards, includes the attachment of documents serving as its reference document (abstract and full-text document), the Information Center does the following on top of the existing functionality about Standards found in Data Management.

- Monitoring the number of copies printed
- Monitoring the number of copies bought through the Web Store
- Setting the price of each standard being made available
- Setting the allowing of full-text of the standards to be freely downloaded. Abstracts of Standards have been agreed to be FREE
- Issuance of Payment Slip to Clients

ISO Standards Catalogue

Since BPS is the only authorized agents to sell ISO Standards in the Philippines, BPS takes in orders from clients and facilitates the processing of this order to ISO.

- ISO Catalogue Maintenance
- Making available list of ISO Catalogue
- Monitoring and Processing of ISO Orders

WEB STORE

The web store houses standards and conformance documents that are for sale and can be purchased either online or non-online. The Web Store facility should be able to facilitate transactions done online and non-online.

General Features

1. Full-featured shopping cart, check out and notification system for ordered, delivered, returned and fulfilled items
2. Payment Gateway to process online payments with ATM and Mobile-Cash Systems
3. Inventory Control
4. Shipping and Other Charges Calculation
5. Pricing Management
6. Ability for users to search for specific item to be bought
7. Ability for users to order for products and choose desired payment option
8. Automatic currency conversion
9. Ability to categorize products
10. Ability for administrators to issue announcements for new products on sale
11. Sales Analysis and tracking of orders, customers, product views and search patterns
12. Documents that are for sale must be properly watermarked with appropriate details about the buyer as part of document security
13. Electronic Invoicing

MESSAGE BOARD

The message board serves as a community bulletin board and idea exchange facility. This fosters the community involve in Standards and Conformance connect with each other and exchange views and resources outside those that have been provided for by the portal.

General Requirements

1. Ability for users to start threads and reply to other user threads
2. Ability to create forums
3. Ability for users to choose showing messages in thread or in chronological order
4. Ability for users to search threads
5. Ability for administrator to edit, delete, move, modify, and merge threads and forums
6. Message formatting should be in various font styles and sized and has provisions for advance users to use HTML
7. Email notification of replies to topics should be an option for users

Aside from the forum features discussed in the EMERGE Terms of Reference, an important facility that should be available is the restriction of some forum channels to selected groups of people. It is a recommended feature that the integration of the CMS to the Message Forum is the hassle-free adding of links on contents from the CMS to messages being posted in the Forum.

SEARCH MECHANISM

The ability of users to search the content of the Portal is an important facility. The facility also serves as an entry point for users to the various types of resources available in the portal. The power of the search facility lies on the indexes that are placed in each of the content, database records and documents in the portal. With a multi-dimensional index design, the search facility is able to not only show portal resources resulting from the search but also its related resources.

General Searching Requirements

1. Ability to search using descriptive metadata and index values (including keywords). The use of Boolean operators, wildcards and qualifiers enhances the search capability using metadata and index values. This allows word phrases to be used as a single search value.
2. Ability to search using specific fields
3. Ability for users to specify preferred sort order for results (e.g. date, type of resource, relevancy)
4. Ability for users to specify preferred number of results per page
5. Ability of users to filter results based on specific fields of the result (e.g. type of resource, specific date)
6. When displaying related resources, the number of related resources should be displayed.

Basic Search

The search facility crawls the entire portal. This means that not only published content are searched but also documents and databases. In basic search, the system looks for matches on all the indexes and keywords of information resources in the portal.

Advance Search

In advance search, users should be provided with means to specify specific index to use for searching. This allows them to be more specific in searching for specific resources. Unlike basic search, users can specify whether they only want to search for documents, databases or content and could further specify index values to use as searching criteria.

Search Results

Search results show information resources that meet the search criteria used. When showing results, it should be based on a specific relevancy formula that orders the results by its corresponding relevancy. When users click on an information resource, the system should be able to show related resources.

DOCUMENT MANAGEMENT SYSTEM AND THE SHARED DOCUMENT REPOSITORY

This feature has been proposed primarily for the type of activities and operations in BPS characterized as heavy on documents and sharing of documents. With the vision of having the S&C Portal also serving the internal need for knowledge sharing, their documents which serve as a primary source of document knowledge may form part of an Internal Information Center accessible by the whole BPS. This attempt is to enable a division of BPS to share documents valuable to the operations of other divisions and to the members of the being proposed National Network of Cooperation.

In its integration to the other systems includes the ability of these documents to be used as reference to published content through the Content Management System. Documents that are used for published content now forms part of the portal's Information Center accessible by the General Public.

User Capability	Administrator Capability related	User Notice Mechanisms	User Notice Visible to
<ul style="list-style-type: none"> Manage sub-folders <ul style="list-style-type: none"> Create, Delete, Modify sub-folders On deleting sub-folders, users will be asked where to move documents in the sub-folder or delete documents together with the sub-folder 	<ul style="list-style-type: none"> Define main folders for each Division Define default sub-folders for each Division which divisions cannot delete or modify Define limits to the size of folder and subfolder of each Division Define access privilege to main folders of each Division Define division user with grant privilege capability 		
<ul style="list-style-type: none"> Search for documents 			
<ul style="list-style-type: none"> Manage Access Privilege on Sub-folders and Documents Access privileges also denotes the tools that can be made available to documents in the sub-folder (all contents have the access privilege) <ul style="list-style-type: none"> Read document meta-information Read and download document (set reading to PDF only or full document) Upload a version Comment on document Browse Folder Contents Make available to Public Portal Notify about document (not an alert system) Send document to Alert System Send document to Library as Holdings Access privileges can be assigned to a single person, a group of persons (typically created by the division using an address list of BPS internal users) 		Notified Documents	Users notified
<ul style="list-style-type: none"> Upload Document <ul style="list-style-type: none"> Enter meta-information about document Index document using BPS Index fields 		New document uploaded	Division Users with privilege on document

<ul style="list-style-type: none"> Version Control <ul style="list-style-type: none"> Updates on document are uploaded and automatically system treats it as a new version. User is asked to enter details about the new version Archive and Purge old versions Set versions to be latest version 		New document version	Division Users with privilege on document
<ul style="list-style-type: none"> Commenting on Document <ul style="list-style-type: none"> Write/Respond to a comment View other comments 			
<ul style="list-style-type: none"> Document Relationship <ul style="list-style-type: none"> Search for documents to relate Relate document Remove existing related documents 			
<ul style="list-style-type: none"> Monitor Documents <ul style="list-style-type: none"> View historical activity on documents View Complete Activity report on all documents in the repository View records attaching the document View content attaching the document View related documents 			
<ul style="list-style-type: none"> Print Document 			
<ul style="list-style-type: none"> Export selected documents to ZIP and download 			
Build-up Requirements for Supplier			
<ul style="list-style-type: none"> Design folder and repository 			
<ul style="list-style-type: none"> Conversion non-electronic documents to PDF 			
<ul style="list-style-type: none"> Migrate electronic documents to Document Repository 			
<ul style="list-style-type: none"> Index documents accordingly 			
Additional Indexing Requirement			
<ul style="list-style-type: none"> Full-text indexed 			
Current Status of Documents			
Critical Document for conversion to PDF		Standards (90%)	
Other Documents have electronic formats			

Documents will be collected and stored for years. It is imperative that some documents needs to be archived in a permanent medium (which is recommended to be DVD). Although some documents are archived, it is important that access to the archive is provided and documents can be requested to from the archive. When documents are archived, historical versions of the documents will not anymore be accessible even if they have been archived as well and only final versions are available for viewing and checkout from the archive.

Documents that have been published in the Portal when archived will be pulled out of the portal and its publication content will also be archived.

Selection Process

Selection of documents for archival is recommended to follow any of the following:

- c. By document age
- d. As selected by the division

By default, documents are archived based on document age. This document age can be configured using the Administration Tool. Archiving is not done automatically. The portal alerts divisions about their documents that have been identified by the system for archiving due to its age. Documents may be selected by the division for archival. These documents when identified and confirmed will not anymore be part of active documents.

On confirmation of the division, these documents automatically will not be part of active documents. When documents have been division-confirmed for archiving, the system prepares folders to which to-be archived documents are moved. Documents are properly organized on these folders given the size of the DVD to which it will be transferred.

Transfer of Documents to Permanent Storage

Selected documents for archival is temporarily moved to a temporary storage until it reaches the size for transfer to DVD. This allows optimization of DVD storage rather than a method of archival by period. Since DVD and archived documents are catalogued, access to the archives can be supported.

Archive Catalog Sub-System

An archive catalog sub-system is used by the Portal Administrator to manage documents to be archived to DVDs as well as DVDs that contains archived documents. The catalog also is in-charge of creating and managing temporary folders to which to-be archived documents are moved.

The Portal Administrator should be able to monitor the following:

- d. Temporary Folders that reached its size limit. When temporary folders have already reached its size limit and are already ready for DVD writing, the catalog automatically generates DVD IDs that will be used to tag DVD Discs. DVD Writing is done manually using commercial DVD Burning application. Portal Administrator has access to the folders and the documents it contain using the server's file explorer.
- e. Temporary Folders that have been already transferred to DVD. When contents of temporary folders have been transferred to DVD, the documents are not automatically deleted. Portal Administrator has the option to delete these files from the storage. DVD details to which the documents were transferred are also properly recorded in the catalog.
- f. Archive DVDs and the documents it contains and on what cabinet it is located

SUPPORT FOR THE NATIONAL NETWORK OF COOPERATION

The Standards and Conformance Portal opens doors to the possible cooperation activities of the being drafted National Network of Cooperation composed of other government agencies, industry associations, expert communities, the business community and the academic community. In order to facilitate these activities, the portal provides them access to the document repository, forum and shared calendar facilities.

With the feature of enabling selected individuals or groups of individuals (defined and configured by BPS), access to the document repository and forum facilities could be restricted for use of affected members of the network. Backed-up with integration of the Portal to the BPS mail system, distribution of new information to affected members could actively be done.

The same design principle has been noted for the use of Technical Committees of the Standards Development Division and committees formed by the Product Certification group in the conduct of their respective mandates of developing standards and implementing guidelines for these standards.

With these access privileges being given to individuals outside of BPS, each division is responsible to administer and manage access privileges being granted, revokes access if necessary to individuals that are no longer part of the network.

Contact and Network Support

The Portal shall include features that will allow each Division of BPS to manage their contact and network of individuals and organizations that they want to manage in the conduct of their activities. Similar to the creation of contacts and distribution list in Microsoft Outlook, these configured contacts or groups of contacts are used for:

- Creating Document Repository folder access privileges
- Creating Forum Channels access privileges
- Creating Shared Calendars
- Distribution of document notifications
- Notification Alerts of Standards and Technical Regulations

Current source of contacts and network of contacts: MICROSOFT OUTLOOK of members of the DIVISION

Needed preparations: Consolidation of contacts and determination of Groups

Proposed extended feature:

- Synchronization of Microsoft Outlook Contacts with the Contacts of the Portal
- Contacts can be searched (especially if other Divisions are adding the same contact that may already be in the master contacts database) but their membership to the Division configured groups remains private to the Division

Shared Calendar Support

Calendars events and activities are set together with the intended participants of the event. Using their respective contacts, BPS Divisions can create events and activities and make these events and activities reflected on the target's calendar. Alerting them through email of the creation of new events should be possible. Alerts through email may be turned off by individuals leaving them with the responsibility to regularly check the portal for new events and activities in their calendar. Individuals could also send comments to events scheduled.

Appendix Q: List of Databases

EMERGE Technical Assistance Program

The following are the databases being maintained by the Bureau of Product Standards that will be included in the Standards and Conformance Portal. These databases were organized based on the BPS Division that will be primary owner of the Database. **Please note, that these are databases and do not necessarily mean only one table.**

Owner Legend:

AT1 : Standards Development Division AT5 : Product Certification
 AT7 : Information Services AT8 : WTO Enquiry Point and Services

Notes on Databases:

All records of the database may be indexed depending on the Division owning the Database. This index is very important as it may be used in order to form possible relationship of one record to several other records from other databases. It is a critical function when browsing or accessing a record, the portal can show related records from other databases (as a reference mode).

Indexes: **COUNTRY, REGION, ICS (Representing Products), INDUSTRY, KEYWORDS, AGENCIES CONCERNED**

Database	Primary User	Related Database	Notes	Users	Other Functions	Estimated Number of Records
Philippine National Standards (this database includes both Draft and Final Philippine National Standards) (also known as Standards Catalog)	AT1	Technical Committees	Standards may be worked on by a Technical Committee	AT1	Draft Philippine National Standards are sent to affected industries and bodies through Notification. Comments are expected to be gathered before the DPNS gets finalized. It has been agreed in the meeting with AT1 and AT7 that the complete standards catalog will be on the database but only the following standards documents will be part of the initial build-up: a. Mandatory b. Developed c. 1990-2006	6,000
		Foreign Standards and Regulations	Foreign Standards and Regulations may be used as reference to the development or adoption of a Philippine National Standards	AT1		
		Laws and Regulations	Philippine National Standards may be promulgated through Department Administrative Order (DAO) and other appropriate orders, laws and regulations (Implementing Rules and Regulations)	AT5		
		TBT Notifications Database	TBT Notifications may actually be affecting an existing Philippine National Standard	AT8		
		Products Under Mandatory Certification	When products are under Mandatory Product Certification, there is an appropriate PNS	AT5		
		Products Database	PNS is for specific product/s	AT1		
		PS and ICC License Holders	When PS and ICC licenses are issued, they are referring to a specific PNS	AT5		

List of Databases

EMERGE Technical Assistance Program
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Technical Committees (should include the members of the Technical committees and their respective membership)	AT1	Philippine National Standards	Standards may be worked on by a Technical Committee	AT1	Technical Committees are given their respective folder in the Document Management System and forum in the Message Forums to facilitate document and idea exchanges.	71 TCs and 1000 volunteers
		Central Contacts Database	Members of the Technical Committees are linked to their appropriate contact information	AT1		
		Products Database	Technical Committees are in-charge of certain products	AT1		
Foreign Standards and Regulations (Foreign standards and regulations must be properly index on the country and product)	AT8		Foreign Standards and Regulations may be gathered and researched by the WTO Enquiry Point Division in conducting service to Exporters	AT8	A technical regulation may actually be related to a standard.	
		Philippine National Standards	Foreign Standards and Regulations may be used as reference to the development or adoption of a Philippine National Standards	AT1		
			The Library may be getting new updates about existing Foreign Standards	AT7		
		Directory of Contact Points	Foreign Standards and Regulations are released through the country's appropriate contact points	AT8		
		Products Database	A Foreign standard or technical regulation is for product/s	AT8		
Directory of Contact Points (Contains the directory of bodies and agencies both foreign and local in the business of standards and regulations)	AT8	TBT Notifications Database	TBT notifications are released through these contact points; likewise, when TBTs are received by BPS, it may be referred to other contact points in the Philippines for appropriate action	AT8		
		Central Contacts Database	Contact persons for each of these contact points are linked to their appropriate contact information	AT8		
		Foreign Standards and Regulations	Foreign Standards and Regulations are released through the country's appropriate contact points	AT8		
TBT Notifications (Contains the list of all TBT Notifications received from other countries)	AT8	Directory of Contact Points	TBT notifications are released through these contact points; likewise, when TBTs are received by BPS, it may be referred to other contact points in the Philippines for appropriate action	AT8	TBTs are sent to affected industries and bodies through Notification. Comments are expected to be gathered before the DPNS gets finalized	
		Philippine National Standards	TBT Notifications may actually be affecting an existing Philippine National Standard	AT8		
		Products Database	TBT Notification is for specific product/s	AT8		
Products Under Mandatory Certification	AT5	Philippine National Standards	When products are under Mandatory Product Certification, there is an appropriate PNS	AT5		91
		Laws and Regulations	When products are under Mandatory Product Certification, there is an appropriate law, order or rules (IRR) issued for its promulgation	AT5		
		Products Database		AT5		

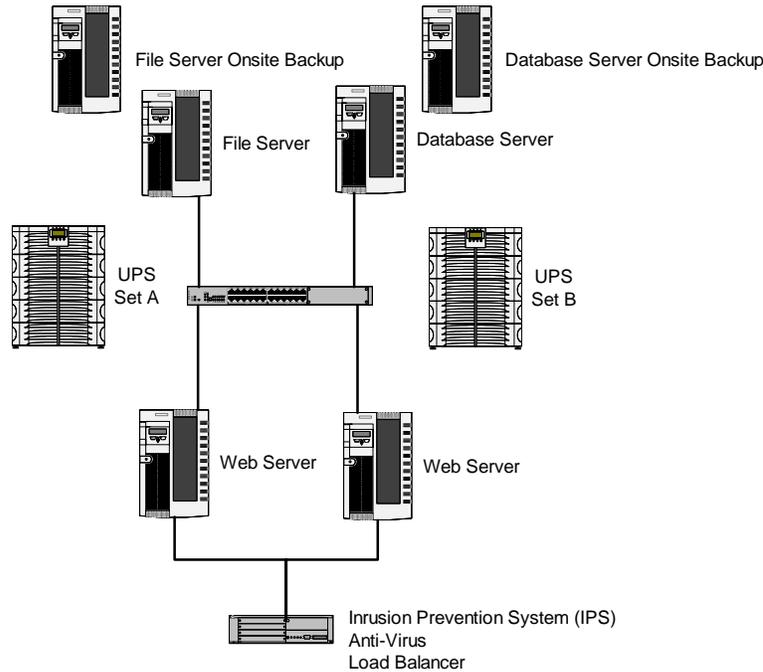
Laws and Regulations	AT7	Philippine National Standards	Philippine National Standards may be promulgated through Department Administrative Order (DAO) and other appropriate orders, laws and regulations (Implementing Rules and Regulations)	AT5	Laws and Regulations may be related to existing Laws and Regulations	
		Products Under Mandatory Certification	When products are under Mandatory Product Certification, there is an appropriate law, order or rules (IRR) issued for its promulgation	AT5		
PS and ICC License Holders (AT5 Database Synchronized)	AT5	Philippine National Standards	When PS and ICC licenses are issued, they are referring to a specific PNS	AT5	Records are synchronized from the SQL Server Database of AT5	
		Company Products Database	PS and ICC License are awarded to a company's specific products (and product variant specifics)	AT5		
Accredited Laboratory and testing Centers (Recognized Laboratories)	PAO	Products Database	Accredited Laboratories and Testing Centers are for specific products (and product variant specifics)	PAO		
		Central Contacts Database	Laboratories and Testing Centers have contacts			
Products Database (also known as ICS)	AT7	Philippine National Standards	PNS is for specific product/s	AT1		Selected ICS
		Technical Committees	Technical Committees are in-charge of certain products	AT1		
		Foreign Standards and Regulations	A Foreign standard or technical regulation is for product/s	AT8		
		TBT Notifications	TBT Notification is for specific product/s	AT8		
		Products Under Mandatory Certification		AT5		
		Accredited Laboratory and testing Centers	Accredited Laboratories and Testing Centers are for specific products (and product variant specifics)	PAO		
		Company Products Database	Company Products are classified based on the Products Database	AT5		
Company Products Database (Company specific products, variants and specifics)	AT5	PS and ICC License Holders	PS and ICC License are awarded to a company's specific products (and product variant specifics)	AT5		
		Products Database	Company Products are classified based on the Products Database	AT5		
		Company Database	Company has specific products	AT5		
Company Database	AT7	Company Products Database	Company has specific products	AT5		
		ISO 9000 and 14000 Certified Companies		QMR		
		Central Contacts Database	Companies have contacts			

ISO 9000 and 14000 Certified Companies	QMR	Company Database		QMR		
Accredited Assessors		Central Contacts Database				
Accredited PETCs		Central Contacts Database				
Local Alliances		Central Contacts Database				
Foreign Alliances		Central Contacts Database				
Accredited Quality Assessment Bodies	QMR	Central Contacts Database				
Industries Database	AT7	Company Database				
		Industry Association Database				
		Central Contacts Database				
Industry Association Database	AT7	Company Database				
		Industries Database				
		Central Contacts Database				
Product Pricing Code	AT7	Products on Sale		AT7		
Company Manufacturing Plants	AT5	Company Database				
Listed Laboratories to Philippines under ASEAN Electrical and Electronic MRA	PAO	Products Database				
Library Holdings and Catalogs	AT7					

Appendix R: Hardware Configuration Proposal for the Implementation of the Standards and Conformance Portal

EMERGE Technical Assistance Program

The following hardware configuration is intended to give the Bureau of Product Standards the extent of the hardware requirements needed to be acquired for the implementation of the Standards and Conformance Portal. The configuration was made considering a three (3) – year no-upgrade scenario. This configuration has been presented and discussed on several meetings in BPS including meetings to resolve the overlap assistance scenario of ECA-EU and EMERGE-USAID. Furthermore, this hardware configuration has been referenced in the drafting of the BPS Hardware funding proposal to the Bangko Sentral ng Pilipinas.



The public access of the Portal may not be handled by having a single web server. It is recommended that at least BPS acquire two web servers, whose load will be managed and balanced by having a Load Balancer. Assuming there are no intrusion and virus detection systems in place, it is also recommended that together with the Load Balancer, an intrusion prevention system and anti-virus system is in place, preferably hardware based.

The Database Server and File Servers are recommended to have Onsite Backup Systems in order to easily recover from Server Failures. With the expected amount of data and files that will be accessed and stored in the S&C Portal, it is recommended that the disk storage to be used uses a RAID 5 100-180GB SCSI Discs that will not only give faster file/data retrieval but also its redundant hot swappable disk and storage design allows the system to easily recover from disk failures.

Server Specification Recommendations

Database Server	File Server	Web Server
Dual-32Bit Processor	Dual-32Bit Processor	Dual-32Bit Processor
2GB Memory	4GB Memory	2GB Memory
RAID 5 100GB SCSI Discs (Hot Swappable)	RAID 5 180GB SCSI Discs (Hot Swappable)	RAID 5 180GB Discs (Hot Swappable)
Redundant Power	Redundant Power	Redundant Power
Tape Backup Drive	Tape Backup Drive	Tape Backup Drive

Appendix S: List of Training Modules

EMERGE Technical Assistance Program

This document intends to give an overview of the extent of training that needs to be delivered to BPS Staff. These are suggested training topics not covering specific training topics based on the product to be supplied by the Supplier. Supplier is expected to give a list of training topics they will cover and this document may be used to reference if supplier coverage is enough to meet capability building of BPS Personnel.

Suggested Number of Participants

Administrator Training

- BPS IT Officer
- Head of the Library
- MIS Representative
- Representative Staff of Administrative Services

Administration Modules

Portal Administration: Core System

- General Portal Administration
- Initial Portal Setup and Configuration
- Troubleshooting
- Programming and Extending the Portal
- Archiving and Backup
- Portal Monitoring
- Generating Monitoring Report

EDMS Administration and Monitoring

Message Forum Administration and Monitoring

AdHoc Database Creation Facility

- Creation of new additional tables
- Creation of forms used to manage the records
- Assigning division to manage the tables
- Deleting/Deactivating tables and corresponding forms
- Modifying table structure and corresponding forms used for managing records
- Selecting database fields that could be viewed by Public or selected users/group of users

Report Generation Facility

Information Center Management

- Materials Cataloging (typical library function of cataloging materials that could be for circulation)
- Setting up of portal availability of the materials and its corresponding reference electronic documents
- Facilitating Borrowing/Returning of materials (for internal circulation only)
- Monitoring the number of copies printed
- ISO Catalogue Maintenance
- Making available list of ISO Catalogue

Web Store Management

- Costing of materials for reproduction of clients
- Monitoring the number of copies bought through the Web Store
- Setting the price of each standard being made available
- Setting the allowing of full-text of the standards to be freely downloaded. Abstracts of Standards have been agreed to be FREE
- Issuance of Payment Slip to Clients
- Monitoring and Processing of ISO Orders

	<p style="text-align: right;">List of Training Modules EMERGE Technical Assistance Program Page S-1 of S-2</p> <hr/> <p style="text-align: center;">MR. OLIVER A. MALABANAN, EMERGE IT Consultant</p>
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Suggested Number of Participants

Administrator Training

- (10) Representatives from each Division
- BPS IT Officer

User Modules

Using the Content Management System

- Content Creation
- Content Review and Modifying Existing Content
- Content Approval
- Content Publication
- Content Retraction
- Content Archival
- Printing of Content

Using the Message Forums

Using the Web Store

- Browsing for Products
- Ordering of Products
- Online Payment
- Checking for status of Orders

Using the Electronic Document Management System

- Managing folders and sub folders
- Search for Documents
- Managing Access Privileges of Folders and Documents
- Uploading Document
- Version Control
- Commenting on Documents
- Document Relationship Building
- Monitoring of Document Activity
- Printing of Documents
- Exporting selected documents to ZIP

Using the Alert and Notification System

- Create a Notification Write-up
- Defining Alert and Notification Parameters and Targets
- Approval of Notification for Distribution (both snail mail and portal distribution)
- Sending of Notification
- Creation of comments and uploading of comment documents
- Viewing of comments
- Uploading of Notification Results and Position Document
- Retraction of Notification
- Closing the Notification

Processing Complaints and Comments

Data Management of Databases

- Add, Delete and Modification of Records
- Keywording and Indexing Records, and Relating records to other records using the BPS Index Set
- Searching and Browsing Records and Related Records from other Databases
- Attaching documents to records
- Selecting Records to be posted in the Portal
- Accessing Reports
- Importing and Exporting records from Excel Worksheet

	<p style="text-align: right;">List of Training Modules EMERGE Technical Assistance Program Page S-2 of S-2</p> <hr/> <p style="text-align: center;">MR. OLIVER A. MALABANAN, EMERGE IT Consultant</p>
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Appendix T:

Other items discussed with MR. Troy Borja in a meeting last December 5, 2006

EMERGE Technical Assistance Program

Databases

The following features should be highlighted:

- Default database records listing
- When displaying record details, the list of related records from other databases should be shown at the end of the record details. (See List of Databases document for the specific related databases)
- Ability to search for specific records within the database
- When searching, ability to indicate other databases which will be searched for related records. Since all records are indexed, use the index to relate records from other databases
- When displaying for related records, a summary of the total number of related records found should be displayed
- Database fields could be selected that could be viewed by Public or selected users/group of users (By Administrator)

Content Valuation

Content must have a facility to be rated by users in terms of its relevance and value to the user

Report Generation

Report Generation Facility should be convenient to use by the Portal Administrator.

December 5, 2006:

It also has been expressed during the meeting with Mr. Troy Borja that BPS requires a system that will allow them to generate and prepare with convenience a Standards Catalogue as was shown during the meeting. Mr. Borja expressed that they will look for appropriate solution or they can develop the necessary program to meet this requirement.

Site Monitoring

There should be a single page where Portal administrator can see all activities on all the sections of the Portal. Administrator may opt to go to a section and see more detailed activity report of the section. Site statistics includes hits, number of visits, average content valuation, and broken links.

Site Map

A Site Map should be made available to all users. The Site Map may be used to move from one section of the Portal to another.

Document Management System

Will be a separate system but its look and feel should be the same with the BPS Portal. As a separate system, documents are moved manually to the Portal for publishing.

December 5, 2006:

Directory of Contact Points

Since this database of contact points is a consolidated list of contact points, there must be a necessary classification scheme where these contact points could be categorized (e.g. WTO Member Country Contact Point, Industry Association Contact Point, Divisional Contact Point).

Appendix U: Work Plan for EMERGE Technical Assistance Phase 2A

EMERGE Technical Assistance Program

This Work Plan was drafted considering the start of the Phase 2 of the Technical Assistance in January 2007. With EMERGE critical deadline of finishing the assistance by June 2007, development time for the Portal is constrained within the period of January to April 2007, with May going to be used for Training and Final Testing of the System. Launching is expected to be during the first two weeks of June 2007.

Harmonizing with the SYSTEMA Work Plan

This Work Plan has already been discussed with the SYSTEMA. During the last meeting with SYSTEMA on December 5, 2006, SYSTEMA will be adjusting their development work plan to suit the four-iterative development method proposed in this work plan. This iterative method is recommended to ensure that software and systems are delivered, prototyped, evaluated and presented to BPS on regular short intervals to reduce the risk towards the end of a system full of unmet expectations. SYSTEMA using this Work Plan will include in their proposal their proposed deliverable set.

Data, Document and Content Conversion

Instead of a one-shot data conversion and migration effort, data, documents and contents are converted, processed and migrated into the portal in a regular basis throughout the duration of the Project. In this mode, while the Portal is being developed, content, data and documents are slowly being transferred to the Portal. This will allow richer data sets that can be demonstrated during the iterative prototype sessions.

To assist BPS in the conduct of necessary activities facilitating the migration of content, data and documents to the BPS Portal, proposal for Phase II included the hiring of contractual staff that will serve administrative support to existing BPS staff in the conduct of content, data, and document preparations, conversions, and migration.

In the discussion with SYSTEMA on December 5, 2006, it has been noted that since the BPS Portal will be available to BPS for their regular review while it is being concurrently being developed, SYSTEMA will provide a temporary system for to-be-hire contractual staff to do the necessary organization of data, digital contents and documents that will be either forwarded to SYSTEMA for migration (or other processing like conversion if necessary) or to be directly placed to the Portal.

Hardware Acquisition Schedule

The EMERGE Technical Assistance does not cover support for hardware. BPS has already been informed about the importance of having the necessary hardware resources ready by the March 2007. With understandable constraints in the acquisition of the necessary hardware by the EMERGE recommended schedule, option of having SYSTEMA to temporarily house the BPS Portal until the necessary hardware resources have been acquired has been suggested.

	2006		2007					
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
SOFT REQUISITES								
Executive Committee Approval of Content and Data Publication Plan		■						
Workplan Approval		■						
DATABASE								
Database and Data Planning and Creation of Database Conversion Plan		■						
Database Conversion Phase 1			■					
Database Conversion Phase 2				■				
Database Conversion Phase 3					■			
CONTENT								
Content Publication Planning		■						
Content Creation/Preparation/Editing and Approval			■	■	■			
Content Transfer			■	■	■			
SOFTWARE SUPPLIER								
Finalize Software Supplier		■						
EMERGE Awarding of Supplier		■						
Supplier BPS Briefing		■						
Skeletal Prototype Demonstration Workshop			■					
SOFTWARE DEVELOPMENT								
1st Iteration Development			■					
1st Prototype Workshop (including with ExeComm)				■				
2nd Iteration Design and Development				■	■			
2nd Prototype Workshop (including with ExeComm)					■			
3rd Iteration Design and Development					■	■		
3rd Prototype Workshop (including with ExeComm)						■		
4th Iteration Design and Development						■	■	
4th Prototype Workshop (including with ExeComm)							■	
PERSONNEL TRAINING								
Training Venue Negotiations					■	■		
Portal Administrator's Training							■	■
BPS Staff Training							■	■
BPS Executive Committee Training							■	■
LAUNCH REQUISITES								
Soft Launch of the Standards and Conformance Portal							■	
Portal Adjustments							■	■
Preparation for Official Launch Event							■	■
Official Launch of the Standards and Conformance Portal								■
Official Turnover of Standards and Conformance Portal								■

Appendix V: Preparations for the EMERGE Technical Assistance Phase II

EMERGE Technical Assistance Program

The impending development of the Standards and Conformance Portal will require BPS to prepare documents, data and content that will be converted and migrated to the new portal. This document serves as a guide for BPS in the conduct of their preparation for the Phase II of the EMERGE Technical Assistance.

CREATION OF A 2007 PUBLICATION PLAN

The life of the Portal depends on the ability of the organization to publish content on a regular basis. As have been discussed in previous meetings and have been emphasized during the meeting with Dir. Motoomull, this publication plan illustrates the organization's commitment to regularly produce content and information for the public. With a portal in place, the development of a publication plan needs to be institutionalized and done on an annual basis.

What does a Publication Plan contains?

The publication plan contains the list of target publications for the year, the process in which to follow, responsibilities of the members of the organization with respect to the publication and the assessment and evaluation of the publication. It is recommended that the organization establish a publication committee that will be in-charge of monitoring and adjusting publication targets on a regular basis. Members of this committee are automatically publication authors with the representative of the Promotions Divisions serving as the editor and publisher.

Organization

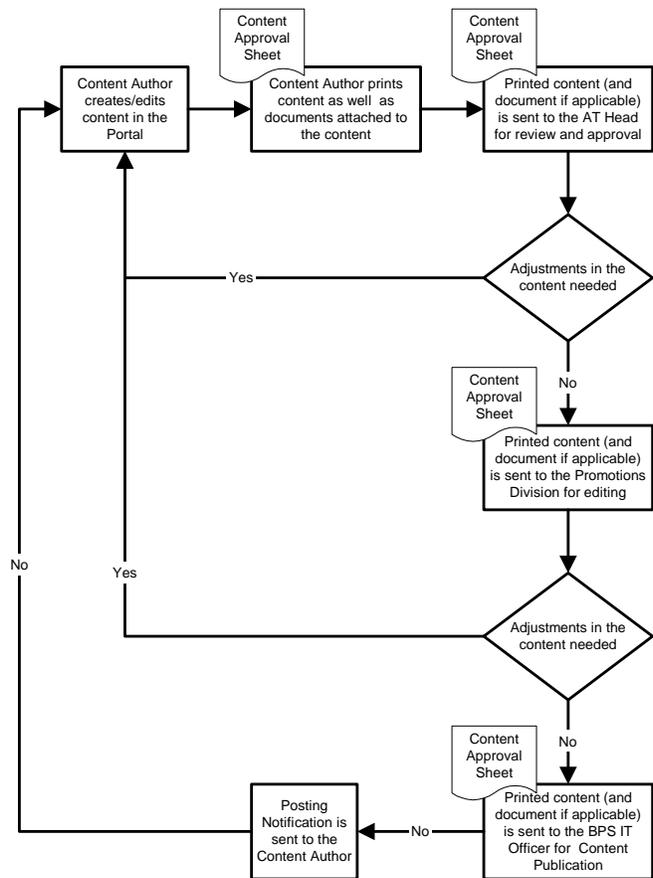
The recommended publication committee must be composed on representatives of each Action Team with the representative of the Promotions Division sitting as chair of the committee. The committee is responsible for laying down publication targets for a particular period (suggestion is to have an annual plan, with committee meetings and reviews done monthly). Committee meetings are intended to report on publications made during the month as well as communicate publication targets for the succeeding month. Representatives to the publication committee are likewise content author designate for the division they are representing, they are in-charge of creating content, content indexing, approval, coordinating with the promotions division for needed digital images, documentation and managing approved content, reporting on value rating for the content published in the portal, archiving and retracting content if necessary.

Publication Process

This recommended publication process was simplified to give considerations to the other activities that are being performed by each Action Team but also have considered that the Portal facility will be used for content creation, editing and publishing.

A content approval sheet is routed together with the printed content (and documents if necessary) for the review, editing and approval. This content approval sheet is similar to the QMS document for content publication to the website.

Adjustments to the content are done directly in the Portal. This eliminates the necessary transformation of content from the usual tools currently used (e.g. Microsoft Word). In this method, upon approval, BPS IT Officer simply clicks on the



Appendix W: List of Activities that will be performed on Phase II Technical Assistance

EMERGE Technical Assistance Program

DEVELOPMENT OF THE PORTAL

Requirements Analysis for detailed technical design of the Portal in consideration of the JOOMLA Product and its extensions	SYSTEMA
Technical design of the Portal	SYSTEMA
Actual Development of Prototypes	SYSTEMA
Presentation of Prototypes to BPS	SYSTEMA
Approval of Prototypes	BPS Working Group and BPS IT Officer
Final Product Presentation	SYSTEMA
Final Approval of Portal	BPS and the Portal Steering Committee

Responsibilities of EMERGE Consultant during the duration of the Development of the Portal

1. Evaluates technical design of SYSTEMA and ensures that features are all covered on their technical design
2. Supervise and coordinates with SYSTEMA in the conduct of the requirements analysis activities
3. Assist BPS in coordinating activities for Portal Prototypes
4. Evaluates Portal Prototypes
5. Discuss and solves development risk and possible problems that may arise during the development period together with SYSTEMA and BPS
6. Conduct regular visits in SYSTEMA development site during the course of development
7. Assist BPS in coordinating with SYSTEMA any adjustment to the specifications as a result of prototype evaluations

PRE-CONTENT PREPARATION ACTIVITIES

Orientation of Staff	EMERGE IT Consultant
Orientation of BPS Personnel on the Role of the Staff and the extent of their services to BPS	EMERGE IT Consultant
Presentation of SYSTEMA and their activities	SYSTEMA
Preparation of Area in BPS for the conversion activity and activities to be performed by Contracted Staff	BPS
Preparation of Needed Equipment and materials for the Contracted Staff	BPS

Responsibilities of EMERGE Consultant regarding the preparation of Content, Documents and Data

1. Assists BPS in the proper collection, selection and gathering of content, documents and data needed to be migrated to the Portal
2. Coordinate with SYSTEMA on proper migration procedures and file protocols to be followed to ensure fast migration to the Portal
3. Orient and guide contracted staff working on the inventory, collection, gathering and encoding of Content, Documents and Data.
4. Assists BPS in the supervision of contracted staff in the conduct of their assigned responsibilities
5. Conduct orientation of BPS, contracted staff with SYSTEMA in the conduct of the whole migration process.

List of Activities that will be performed
on Phase II Technical Assistance
EMERGE Technical Assistance Program
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Responsibilities to be assigned to Contracted Staff:

CLERICAL-EDITORIAL (2) (5 months)

1. Assist BPS In the gathering of identified content, documents, materials, resources and databases to be migrated into the Portal
2. Catalogue and Inventory all gathered content, documents, materials, resources and databases whether softcopy or hardcopy
3. Assist BPS in the editing of content for publication to the Portal
4. Encodes identified index for each document, materials, resources and databases.
5. Encodes content and their corresponding indexes directly to the Portal
6. Provide Assistance to logistics and administrative requirements of the development of the BPS Portal
7. Provide logistical services related to the development of the Portal and the conversion and migration of resources to the Portal

CLERICAL-IT (2) (5 months)

1. Assist BPS In the gathering of databases to be migrated into the Portal
2. Catalogue and Inventory all gathered databases whether softcopy or hardcopy
3. Encodes identified index for each record in the databases.
4. Transforming existing databases to EXCEL format
5. Transforming excel versions of BPS Database and other data to the SYSTEMA format
6. Provide Technical Assistance to the requirements of activities concerning prototype presentations and launching

Appendix X: List of Activities to be performed by Technical Consultant on EMERGE Technical Assistance PHASE II on the Standards and Conformance Portal

EMERGE Technical Assistance Program

CONSULTANT'S ACTIVITIES FOR TECHNICAL ASSISTANCE PHASE II

1. Assistance to the Technical Implementation of the BPS Portal
 - a. Evaluates technical design of SYSTEMA and ensures that features are all covered on their technical design
 - b. Supervise and coordinates with SYSTEMA in the conduct of their requirements analysis activities
 - c. Discuss and solves development risk and possible problems that may arise during the development period together with SYSTEMA and BPS
 - d. Conduct regular visits in SYSTEMA development site during the course of development
2. Prototype Evaluation
 - a. Assist BPS in coordinating activities for Portal Prototypes
 - b. Assist BPS in coordinating with SYSTEMA any adjustment to the specifications as a result of prototype evaluations
 - c. Evaluates Portal Prototypes
3. Assistance to the Content Preparation and Conversion Activities
 - a. Assistance to BPS in the methods and process of preparation and conversion activities
 - b. Assistance to BPS in the supervision of staff to be assigned to BPS
 - c. Coordinate with SYSTEMA on proper migration procedures and file protocols to be followed to ensure fast migration to the Portal
 - d. Orient and guide contracted staff working on the inventory, collection, gathering and encoding of Content, Documents and Data.
4. Supervision of the Implementation of the BPS Portal by the Supplier
5. Monitoring of adherence to the agreed separation of activities and scope of ECA and EMERGE

Output to be submitted by the Consultant to EMERGE on four tranches

1. Content Preparation and Conversion Process and Method
2. Technical Evaluation of the SYSTEMA Architecture of the Portal
3. Supervisory Activity on Conversion and Prototype Report
4. Final Project Report

Appendix Y: Conversion: Division of Responsibility

EMERGE Technical Assistance Program

The impending conversion activity with its effect on cost requires that the division of responsibility and output expected be laid down and coordinated with the supplier SYSTEMA Corp. This document has been submitted to SYSTEMA for their consideration in finalizing cost areas on their proposal for conversion.

Schedule of Conversion

Initial Preparation of Resources to be uploaded to the Portal	January
1 st Phase of Digitization, Conversion, Uploading and Migration	February
2 nd Phase of Digitization, Conversion, Uploading and Migration	March
3 rd Phase of Digitization, Conversion, Uploading and Migration	April

It was understood that BPS cannot prepare all the resources that will be migrated into the Portal at one shot such that a phasing of the activities is needed.

DATABASES

Activity	Responsibility to	Expected Output	Remarks
Preparation of existing databases on their existing formats (word, excel, access, SQL Server)	Respective BPS AT	Softcopy of the databases Inventory in Excel of these databases	
Collection and Gathering of these databases	Assigned Staff	Collected Softcopy of the databases and Inventory in Excel	
Conversion of these formats to Excel worksheet format	Assigned Staff	Excel version of the Database	
Submission of SYSTEMA of Excel worksheet format to use	SYSTEMA	Excel worksheet that will serve as template for the conversion of the existing excel version of the BPS database	
Conversion of existing Excel worksheet version of the database to the supplied worksheet format of SYSTEMA	Assigned Staff	Excel worksheet conforming to the SYSTEMA format	
Proper indexing of these databases using the Standards and Conformance Portal set of Index fields	Respective BPS AT to identify the index for each of their record Assigned Staff to encode the index of each record	Index-filled Excel version of the Database	
Validating the Excel worksheets for transmission to SYSTEMA for migration	Respective BPS AT	Validated Excel Worksheets	
Migration of the Excel Worksheet to the Portal	SYSTEMA	Database in the Portal	Costing at Php 2,000.00 per Excel worksheet
Validation of Migrated Database	Respective BPS AT	Validated Database	

Databases with Documents

Documents that will be attached to some records must be prepared ahead of time in its PDF version. Primary to this is the Standards Catalog.

Notes

1. Inventory of Databases will include the indexes.
2. SYSTEMA as an alternative mechanism will make available the Portal's DB Management feature to BPS in case of direct encoding the database

CONTENT

Activity	Responsibility to	Expected Output	Remarks
Preparation of existing content on their existing formats (MS Word Format or non-WORD format)	Respective BPS AT	Electronic contents to be migrated into the Portal. Inventory in Excel of these content	
Collection and Gathering of these content	Assigned Staff	Collected Electronic Contents and Inventory in Excel	
Conversion of non-WORD formats to WORD format	Assigned Staff	MS Word version of non-MS WORD content	
Proof-reading of Content and Editorial	Assigned Staff	Edited and Proof-read MS Word version of content	
Proper indexing of these content using the Standards and Conformance Portal set of Index fields	Respective BPS AT to identify the index for each of their record Assigned Staff to encode the index of each record	Index-filled Excel Inventory	
Training of SYSTEMA on staff regarding the uploading of content to the Portal	SYSTEMA	Trained assigned staff in uploading content into the Portal	
Uploading of content and their respective indexes to the Portal	Assigned Staff	Content in the Portal	
Validation of Migrated Content	Respective BPS AT	Validated Content	

Notes

1. Inventory of Contents includes the section in which it will be uploaded.
2. SYSTEMA will be configuring the Portal sections where the contents will be uploaded. Assigned Staff will assume that sections already exist and they will only upload content into their respective sections. In case of sections that need to be created, SYSTEMA will be creating these sections as requested.
3. SYSTEMA will make available the CMS to BPS for this purpose

Contents with Documents

Documents that will be attached to some contents must be prepared ahead of time in its PDF version. Assigned staff will be converting existing document for attachment to PDF and uploading it into the Portal. These documents are necessarily needed to be inventory since it has to be consistent with the inventory of documents.

DOCUMENT

Activity	Responsibility to	Expected Output	Remarks
Preparation of existing documents on their existing formats (Electronic or Hardcopy)	Respective BPS AT	Documents to be migrated into the Portal in any format (Electronic or Hardcopy) Inventory in Excel of these content	
Collection and Gathering of these content	Assigned Staff	Collected of Electronic or Hardcopy Documents and Inventory in Excel	
Proper indexing of these content using the Standards and Conformance Portal set of Index fields	Respective BPS AT to identify the index for each of their record Assigned Staff to encode the index of each record	Index-filled Excel Inventory	
Conversion of existing electronic content to PDF	Assigned Staff	PDF versions of already electronic documents	
Digitization of Hardcopy Documents Includes Unbinding, Digitization, Rebinding	SYSTEMA	PDF version of hardcopy documents Returned to original form of hardcopy documents	
Uploading of all PDF documents to the Portal	SYSTEMA	Uploaded PDF into the EDMS	
Training of SYSTEMA on staff regarding the indexing of uploaded documents in the Portal	SYSTEMA	Trained assigned staff in encoding indexes on documents	
Encoding of indexes of documents directly to the Portal	Assigned Staff	Indexed document in the Portal	
Validation of Migrated Documents	Respective BPS AT	Validated Documents	

Note:

1. Inventory of documents also includes the folder in which they will be stored.
2. SYSTEMA will be configuring the folders where the documents will be uploaded. Outsourced company will be responsible for uploading the documents to the EDMS and SYSTEMA will be training the staff of the outsourced company for this purpose

LIBRARY and WEBSTORE

Activity	Responsibility to	Expected Output	Remarks
Preparation of existing holdings	Library		
Collection and Gathering of these holdings	Assigned Staff	Collected Holdings	
Submission of SYSTEMA of Excel worksheet format to use for the proper cataloging of the holdings	SYSTEMA	Worksheet Template for Cataloging of Holdings	
Cataloging of the holdings using Excel	Assigned Staff	Catalog in Excel	
Proper indexing of these holdings using the Standards and Conformance Portal set of Index fields	Library to identify the index for each of their record Assigned Staff to encode the index of each record	Index-filled Catalog in Excel	
Encoding of price code for each holdings	Library to identify the price code for each of their holdings Assigned Staff to encode the price code	Price-coded Catalog in Excel	
Validating the Excel catalog for transmission to SYSTEMA for migration	Library	Validated Catalog in Excel	
Migration of the Catalog to the Portal	SYSTEMA	Catalog in the Portal	Costing at Php 2,000.00 per Excel worksheet
Validation of Migrated Catalog	Library	Validated Catalog	

Holdings with Documents

Documents that will be attached to catalogs must be prepared ahead of time in its PDF version. Assigned staff will be converting existing document for attachment to PDF and uploading it into the Portal. These documents are necessarily needed to be inventory since it has to be consistent with the inventory of documents.

Notes:

1. Web Store of Standards and the Documents for their online download
2. Database of Standards is the same Standards Catalog and the standards for sale items in the Web Store

Appendix Z: Digitization Plan

EMERGE Technical Assistance Program

This document details the digitization plan for the documents that needs to be electronically converted and migrated to the Document Management System of the Standards and Conformance Portal. It has to be noted that this plan is intended to monitor the transmission of documents from one location to another and the inventory of digitized documents.

Digitization Process

Steps to be taken	Person Responsible	Location	Resources Needed
Action Team submits the documents that will be digitized and the corresponding inventory sheet for the documents to the Library for proper safe keeping.	Action Team Representative	Action Team	Inventory Sheet
On submission to the Library, the inventory is checked against actual documents being submitted	Library Representative	Library	Inventory Sheet Library Space for Inventory Checking
The documents are carefully bundled and labeled and the Inventory Sheet is kept for safekeeping until it is released to the Supplier for digitization	Library Representative	Library	Inventory Sheet Library Space for Inventory Checking Library Space for Safekeeping
Supplier gets the documents for digitization. Supplier uses the inventory sheet for the proper inventory of documents that will be pulled out of BPS	Supplier Representative Library Representative	Library	Inventory Sheet Library Space for Inventory Checking
Supplier Digitizes the documents and stores digitized documents in CD. Digitized documents must use filenames and are properly logged against the inventory sheet	Supplier	Supplier	Photocopy of Inventory Sheet
Supplier upload digitized documents to the Document Management System, on folders indicated where the documents should be placed	Supplier	Supplier	Photocopy of Inventory Sheet
Supplier sends back to BPS documents that were digitized as well as the CD containing the digitized version.	Supplier	Supplier	Photocopy of Inventory Sheet
Documents are received by BPS. The documents are again checked against the list of transmitted documents in the inventory sheet.	Supplier Representative Library Representative	Library	Inventory Sheet Library Space for Inventory Checking
The digital versions of the documents are also checked against the recorded inventory of digital documents	Supplier Representative Library Representative Action Team Representative	Library	Inventory Sheet Library Space for Inventory Checking Computer with CD-ROM for digital version checking
The Action Team checks digital versions' quality and consistency with the original document. In case of need for re-digitization, Action Team submits the inventory sheet properly marking documents that needs re-digitization	Action Team Representative	Library	Inventory Sheet Computer with CD-ROM for digital version checking
On digitized versions that are deemed erroneous, non-quality scanned, with unreadable areas, etc. Supplier is called to re-digitize the document and the process and cost is charged against the supplier	Action Team Representative Supplier Representative	Library	Inventory Sheet Computer with CD-ROM for digital version checking

Digitization Plan

EMERGE Technical Assistance Program

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Document Digitization Inventory Sheet

Source Action Team: _____

Action Team Designate In-Charge: _____
Complete Name

Signature

Document Code	Document Title	Number of Pages	Number of Pages received by Library	Number of Pages received by Supplier	Digitized document filename/s	CD # where documents were stored	Number of Pages returned to the Library	Digital version is consistent with the original document	Running Remarks

Verified transmission to Library by:	_____	_____ (AT)
Verified receipt of documents from AT by:	_____	_____ (Library)
Verified transmission to Supplier by:	_____	_____ (Library)
Verified receipt of documents from BPS by:	_____	_____ (Supplier)
Digitized and transferred to CD by:	_____	_____ (Supplier)
Verified transmission to BPS by:	_____	_____ (Supplier)
Verified digital document transmission to BPS by:	_____	_____ (Supplier)
Verified receipt of documents from Supplier by:	_____	_____ (Library)
Verified digital version consistent with document by:	_____	_____ (AT)
Inventory checked and verified by:	_____	_____ (AT)

Appendix AA: BPS Responsible for Content, Document, Database and Other Resources

EMERGE Technical Assistance Program

This document lists down the BPS Staff responsible for resources of their respective Action Teams during the course of preparation, conversion and migration of resources to the Portal, as agreed during the meeting of the Portal Working Group on December 6, 2007.

Division of BPS	Responsible for Gathering, Collection and Indexing of Resources	Alternate
AT1 Standards Development	Nilda Adao	Daisy Omila
AT2 Promotions and Media Relations	Camille Castillo	Glo Urbano
AT3 Enforcement	Sammy Paden	Raymund Ruelos
AT4 Testing	Gerry Panopio	Estrel Abejero
AT5 Certification	Frank Barranta	Rose Rino
AT6 Special Projects	Carmencita Magno	Melinda Cauilan
AT7 Information Services	Lourdes Navia	Victoria Homoroc
AT8 WTO TBT Enquiry Point	Victoria Campomanes	Herminia Gamit
AT9 International Relations	Sonny Erna	Aryan Basas
AT10 PETC	Atty. Jojo Jacob	Gerezon Bernal
PAO Philippine Accreditation Office	Nanie Fidelino	Ellen Cruz
QMR Quality Management Representatives	Malene Vitug	Daryll Cabalona
Office of the Bureau Director	Ryan Joel Estares	Mely Rayala
IT and Admin	Ryan Joel Estares	Josie Laroya

Appendix BB: Inventory of Databases, Content, Documents, Reports and Library Holdings

EMERGE Technical Assistance Program

In order to prepare the resources that will be migrated to the Portal, we have to request each Action Team for the inventory of resources which they plan to migrate to the Portal. We will be recommending major types of resources but each Action Team is at the best position to indicate the actual resources important for them to be migrated to the Portal.

To facilitate the inventory of these resources, we will provide each AT with a draft list of resources which is being recommended to be migrated to the Portal. Although the list should not constraint the AT to add more.

STANDARDS DEVELOPMENT			
Resource	Indicate Format Available Hardcopy, Excel Worksheet, Word Document, PowerPoint Format, etc.	Quantity in Electronic Form	Quantity in Non-Electronic Form
1. Philippine National Standards Database <ul style="list-style-type: none"> List of PNS including its status, superceded PNS, and other relationship with other PNS 			
2. Reference Standards and Technical Regulations used in Drafting Standards <ul style="list-style-type: none"> List of References used Actual documents referenced 			
3. Philippine National Standards <ul style="list-style-type: none"> Actual Documents, for each document, please indicate the status of the document (lost, hardcopy only, electronic available), number of pages 			
4. Technical Committees and Members <ul style="list-style-type: none"> Including its relationship with the PNS Contact Information of TC members 			
5. Documents of the Technical Committees <ul style="list-style-type: none"> Minutes of the Meetings Position Paper Documented Discussions Reference Documents used Other documents produced 			
6. News released by Standards Development <ul style="list-style-type: none"> News released for 2006 			
7. Documents about the Standards Development Program			
8. FAQs on Standards Development			
9. Forms and Documents that could be made available to the AT, BPS, Public or to Groups of People concerned with Standards Development			
10. Draft Philippine National Standards <ul style="list-style-type: none"> List of Draft PNS for 2006 and their corresponding PNS should it has been finalized Technical Committees that worked on the DPNS and their documents Active DPNS, include notifications and comments that have 			

been gathered already			
11. AT Members, contact information and Picture			
12. Other pictures that could be part of promotions of the activities of the Division, please provide document write-up about the activities and the pictures			
13. Presentation Materials that could be shared within the AT, BPS and the Public			
14. Database of Company, Business and Industry Contacts			
15. Regular reports being submitted			
16. Special reports submitted in 2005 and 2006			

WTO ENQUIRY POINT			
Resource	Indicate Format Available Hardcopy, Excel Worksheet, Word Document, PowerPoint Format, etc.	Quantity in Electronic Form	Quantity in Non-Electronic Form
1. Local Contact Points Database			
2. Foreign Contact Points Database			
3. Reference Foreign Standards and Technical Regulations researched to answer enquiries posted by clients			
4. List of TBT Notifications for 2004, 2005 and 2006 <ul style="list-style-type: none"> • Notification Document • Text of the Notification • Gathered and submitted comments locally • Position/Comment Document of the Philippine Government • Status of the Notification and actual Technical Regulation resulting from the TBT • Active Notifications and Status • Targets of Distribution made of TBT Notifications 			
5. About WTO and the Philippine WTO Enquiry Point and Services			
6. News released by WTO TBT Enquiry Point <ul style="list-style-type: none"> • News released for 2006 			
7. Directory of local distribution points of TBTs			
8. FAQs on WTO Enquiry Point			
9. Forms and Documents that could be made available to the AT, BPS, Public or to Groups of People concerned with WTO Enquiry Point Services			
10. AT Members, contact information and Pictures			
11. Other pictures that could be part of promotions of the activities of the Division, please provide document write-up about the activities and the pictures			
12. Presentation Materials that could be shared within the AT, BPS and the Public			
13. Database of Company, Business and Industry Contacts			
14. Regular reports being submitted			
15. Special reports submitted in 2005 and 2006			

PRODUCT CERTIFICATION			
Resource	Indicate Format Available Hardcopy, Excel Worksheet, Word Document, PowerPoint Format, etc.	Quantity in Electronic Form	Quantity in Non-Electronic Form
1. Copy of actual SQL Database being used			
2. News from the Product Certification and Testing Divisions <ul style="list-style-type: none"> News released for 2006 			
3. Information about ICC and PS <ul style="list-style-type: none"> Documents explaining what ICC and PS marks are Documents explaining the importance of Product Certification Laws governing ICC and PS marks 			
4. Procedures and Guidelines for Product Certification and Testing <ul style="list-style-type: none"> Flowchart of getting Product Certification List of Requirements Charges and Fees 			
5. Database of Products under Mandatory Certification			
6. Database of PS and ICC License Holders			
7. Database of Accredited Laboratory and Testing Centers			
8. Documents about the BPS Product Certification Program and Testing Services			
9. FAQs on Product Certification and Testing Services			
10. Forms and Documents that could be made available to the AT, BPS, Public or to Groups of People concerned with Product Certification and Testing Services			
11. AT Members, contact information and Picture			
12. Other pictures that could be part of promotions of the activities of the Division, please provide document write-up about the activities and the pictures			
13. Presentation Materials that could be shared within the AT, BPS and the Public			
14. Database of Company, Business and Industry Contacts			
15. Regular reports being submitted			
16. Special reports submitted in 2005 and 2006			

PROMOTION AND MEDIA RELATIONS			
Resource	Indicate Format Available Hardcopy, Excel Worksheet, Word Document, PowerPoint Format, etc.	Quantity in Electronic Form	Quantity in Non-Electronic Form
1. Copies of Newsletter for 2005 and 2006			
2. Product Guides			
3. News from the Promotion and Media Relations Group <ul style="list-style-type: none"> • News released for 2006 			
4. Documents about the Promotions and Media Relations Group			
5. FAQs on Promotions and Media Relations			
6. Forms and Documents that could be made available to the AT, BPS, Public or to Groups of People concerned with Product Certification and Testing Services			
7. AT Members, contact information and Picture			
8. Other pictures that could be part of promotions of the activities of the Division, please provide document write-up about the activities and the pictures			
9. Presentation Materials that could be shared within the AT, BPS and the Public			
10. Database of Company, Business and Industry Contacts			
11. Regular reports being submitted			
12. Special reports submitted in 2005 and 2006			

ENFORCEMENT AND CONSUMER ASSISTANCE			
Resource	Indicate Format Available Hardcopy, Excel Worksheet, Word Document, PowerPoint Format, etc.	Quantity in Electronic Form	Quantity in Non-Electronic Form
1. News from the Enforcement and Consumer Assistance Group • News released for 2006			
2. Documents about the Enforcement and Consumer Assistance Group			
3. FAQs on Enforcement and Consumer Assistance			
4. eForms and Documents that could be made available to the AT, BPS, Public or to Groups of People concerned with Product Certification and Testing Services			
5. AT Members, contact information and Picture			
6. Other pictures that could be part of promotions of the activities of the Division, please provide document write-up about the activities and the pictures			
7. Presentation Materials that could be shared within the AT, BPS and the Public			
8. Database of Company, Business and Industry Contacts			
9. Regular reports being submitted			
10. Special reports submitted in 2005 and 2006			

REGISTRATION OF ASSESSORS AND SPECIAL PROJECTS			
Resource	Indicate Format Available Hardcopy, Excel Worksheet, Word Document, PowerPoint Format, etc.	Quantity in Electronic Form	Quantity in Non-Electronic Form
1. Database of Accredited Assessors • Contact Information			
2. News from the Registration of Assessors and Special Projects Group • News released for 2006			
3. Documents about the Registration of Assessors and Specials Project Group • List on Ongoing Projects, write-ups, status, updates, news			
4. FAQs on Registration of Assessors and Special Projects			
5. Forms and Documents that could be made available to the AT, BPS, Public or to Groups of People concerned with Product Certification and Testing Services			
6. AT Members, contact information and Picture			
7. Other pictures that could be part of promotions of the activities of the Division, please provide document write-up about the activities and the pictures			
8. Presentation Materials that could be shared within the AT, BPS and the Public			
9. Database of Company, Business and Industry Contacts			
10. Regular reports being submitted			
11. Special reports submitted in 2005 and 2006			

INTERNATIONAL RELATIONS			
Resource	Indicate Format Available Hardcopy, Excel Worksheet, Word Document, PowerPoint Format, etc.	Quantity in Electronic Form	Quantity in Non-Electronic Form
1. News from the International Relations Group • News released for 2006			
2. Documents about the International Relations Group • List on Ongoing Projects, write-ups, status, updates, news			
3. FAQs on International Relations			
4. Forms and Documents that could be made available to the AT, BPS, Public or to Groups of People concerned with Product Certification and Testing Services			
5. AT Members, contact information and Picture			
6. Other pictures that could be part of promotions of the activities of the Division, please provide document write-up about the activities and the pictures			
7. Presentation Materials that could be shared within the AT, BPS and the Public			
8. Database of Company, Business and Industry Contacts			
9. Regular reports being submitted			
10. Special reports submitted in 2005 and 2006			

STRATEGIC ALLIANCES			
Resource	Indicate Format Available Hardcopy, Excel Worksheet, Word Document, PowerPoint Format, etc.	Quantity in Electronic Form	Quantity in Non-Electronic Form
1. News about Strategic Alliances • News released for 2006			
2. Documents about Strategic Alliances • List on Ongoing Projects, write-ups, status, updates, news			
3. Database of Local Alliances			
4. Database of Foreign Alliances			
5. FAQs on Strategic Alliances			
6. Forms and Documents that could be made available to the AT, BPS, Public or to Groups of People concerned with Product Certification and Testing Services			
7. AT Members, contact information and Picture			
8. Other pictures that could be part of promotions of the activities of the Division, please provide document write-up about the activities and the pictures			
9. Presentation Materials that could be shared within the AT, BPS and the Public			
10. Database of Company, Business and Industry Contacts			
11. Regular reports being submitted			
12. Special reports submitted in 2005 and 2006			

PETC ACCREDITATION			
Resource	Indicate Format Available Hardcopy, Excel Worksheet, Word Document, PowerPoint Format, etc.	Quantity in Electronic Form	Quantity in Non-Electronic Form
1. News from PETC Accreditation Group • News released for 2006			
2. Documents about PETC Accreditation			
3. Database of Accredited PETCs			
4. FAQs on Strategic Alliances			
5. Forms and Documents that could be made available to the AT, BPS, Public or to Groups of People concerned with Product Certification and Testing Services			
6. AT Members, contact information and Picture			
7. Other pictures that could be part of promotions of the activities of the Division, please provide document write-up about the activities and the pictures			
8. Presentation Materials that could be shared within the AT, BPS and the Public			
9. Database of Company, Business and Industry Contacts			
10. Regular reports being submitted			
11. Special reports submitted in 2005 and 2006			

QUALITY MANAGEMENT SYSTEMS CERTIFICATION			
Resource	Indicate Format Available Hardcopy, Excel Worksheet, Word Document, PowerPoint Format, etc.	Quantity in Electronic Form	Quantity in Non-Electronic Form
1. News from the Quality Management Systems Group • News released for 2006			
2. Documents about Quality Management Systems			
3. Database of Accredited Quality Assessment Bodies			
4. Database of ISO 9000 and 14000 Certified Companies			
5. FAQs on Quality Management Systems			
6. Forms and Documents that could be made available to the AT, BPS, Public or to Groups of People concerned with Product Certification and Testing Services e.g. QMR Process Documents, Forms , etc.			
7. AT Members, contact information and Picture			
8. Other pictures that could be part of promotions of the activities of the Division, please provide document write-up about the activities and the pictures			
9. Presentation Materials that could be shared within the AT, BPS and the Public			
10. Database of Company, Business and Industry Contacts			
11. Regular reports being submitted			
12. Special reports submitted in 2005 and 2006			

LIBRARY			
Resource	Indicate Format Available Hardcopy, Excel Worksheet, Word Document, PowerPoint Format, etc.	Quantity in Electronic Form	Quantity in Non-Electronic Form
1. Standards Catalogue <ul style="list-style-type: none"> List of Standards Actual status of Standards Standards without copies, incomplete Existing reproduced copies 			
2. ICS Index			
3. Industry Classification Scheme			
4. Industry Associations Database			
5. Country Coding Scheme			
6. Region Coding Scheme			
7. Order-related Documents <ul style="list-style-type: none"> Receipt Notices Order documents Invoice Inventory of Copies 			
8. Pricing Scheme			
9. Catalogue of Library Holdings <ul style="list-style-type: none"> Catalogue of Magazines, Reports, Publications and other Materials in the Library Catalogue of ISO CDs Catalogue of Relevant Articles 			
10. FAQs on Library Services			
11. Forms and Documents that could be made available to the AT, BPS, Public or to Groups of People concerned with Product Certification and Testing Services			
12. AT Members, contact information and Picture			
13. Other pictures that could be part of promotions of the activities of the Division, please provide document write-up about the activities and the pictures			
14. Presentation Materials that could be shared within the AT, BPS and the Public			
15. Database of Company, Business and Industry Contacts			
16. Regular reports being submitted			
17. Special reports submitted in 2005 and 2006			

Appendix CC: Budget Proposal for EMERGE Technical Assistance Phase 2A

EMERGE Technical Assistance Program

The budget items and cost indicated in this document has been discussed and analyzed based on the extent of programming required for the components of the BPS Portal to be funded by EMERGE. Budget estimates were conferred with the BPS IT Officer and was discussed in a meeting with Director Motoomull for his evaluation and comments.

COST ITEM	ESTIMATE COST IN PESOS	RUNNING TOTAL COST
Systems Development including Training and Staff Capacity Building Major cost areas on systems development are the development cost on customized functionalities and the building of database and necessary functions to manage records. With the number of databases that are carried on to EMERGE, we estimated that the cost for building these databases will reach around 1.5-2.0 x the cost of ECA	PHP 3,900,000.00 Vat Exclusive Estimate	3,900,000.00
Content Build-up <ul style="list-style-type: none"> Digitization Conversion Synchronization of the AT5 Database to the Portal Database Cost of document digitization has been estimated at Php 6.00 per page. At 150,000 pages, this is estimated at Php 900,000.00. Database records and conversion is estimated at Php 300,000.00.00.	PHP 1,200,000.00 (Max) Budgeted mode Whatever content may be digitized using the budgeted value	1,200,000.00
Preparation of Content, Records and Document that will be part of Initial Portal Build-up <ul style="list-style-type: none"> Personnel <ul style="list-style-type: none"> Clerical Staff (2) 15,000.00/monthx 5 months = 150,000.00 Clerical-IT Staff (2) 20,000.00/monthx 5 months = 200,000.00 Specialized Staff (1) 30,000.00/monthx 5 months = <u>150,000.00</u> 500,000.00 Materials for the inventory of content, records and documents Reproduction Expenses 	PHP 500,000.00 5 months x 4 weeks x 2,500.00/week PHP 50,000.00 5 months x 4 weeks x 1,250.00/week PHP 25,000.00	575,000.00
Soft Launching, Pilot Testing and Actual Launch <ul style="list-style-type: none"> Office Supplies Launching with Stakeholders <ul style="list-style-type: none"> Food and Venue Materials for Launching (including Promotional Materials) Logistics Computer Rentals 	PHP 25,000.00 50 people x Php 1,500.00 PHP 75,000.00 PHP 40,000.00 PHP 30,000.00 PHP 50,000.00	220,000.00
Consultant's Fees	30,250.00 Php/week x 26 weeks PHP 786,500.00	786,500.00
TOTAL BUDGET ESTIMATE		6,681,500.00

Appendix DD: Cost Reduction Efforts Made

EMERGE Technical Assistance Program

CONVERSION COST

Initial cost of Conversion was estimated using the following figures:

150,000	documents	
4,000,000	character of records and content to be migrated into the portal. This represents news, articles, and other content that will be placed in the portal	
100	Excel Sheets	

Letting SYSTEMA handle all the conversion will be computed using their rate as:

150,000	x 3.00 Php/page	=	450,000.00	digitization and uploading of documents
4,000,000	x 60.00 Php/1,000 characters	=	240,000.00	content migration
100 Excel Sheets	x 2,000.00 Php/Excel Sheet	=	200,000.00	database migration
SYSTEMA Management Fee		=	<u>300,000.00</u>	
			1,190,000.00	

To maximize the responsibilities of the staff and have the staff to directly encode the contents to the Portal and leave SYSTEMA with an estimated 1,000,000 characters worth of content, and requested BPS to only limit the number of pages EMERGE will shoulder for conversion, furthermore SYSTEMA's management fee was requested to be reduced as well:

110,000	x 3.00 Php/page	=	330,000.00	digitization and uploading of documents
1,000,000.00*	x 60.00 Php/1,000 characters	=	60,000.00	content migration
100 Excel Sheets	x 2,000.00 Php/Excel Sheet	=	200,000.00	database migration
SYSTEMA Management Fee		=	<u>280,000.00</u>	
			870,000.00	

Cost Reduced: **320,000.00**

* I reserved an estimated 1,000,000 characters since I am concerned about the time frame for migration and it may need some to be done by SYSTEMA even if there are personnel to be assigned to BPS

STAFF COST

On the hiring of specialized staff, BPS was requested to simply be assisted with clerical-editorial and IT assistance instead of professional assistance knowledgeable on WTO and Standards and Conformance. It has been requested to BPS to supervise the staff and be the one responsible for properly identifying the correct indexes to use for its documents, content and databases.

Initial costing with specialized staff on WTO:

Clerical Staff	(2):15,000.00/monthx 5 months =	150,000.00
Clerical-IT Staff	(2):20,000.00/monthx 5 months =	200,000.00
Specialized Staff	(1):30,000.00/monthx 5 months =	<u>150,000.00</u>
		500,000.00

Removal of the Specialized Staff:

Clerical Staff	(2):15,000.00/monthx 5 months =	150,000.00
Clerical-IT Staff	(2):20,000.00/monthx 5 months =	<u>200,000.00</u>
		350,000.00
Cost Reduced:		150,000.00

TOTAL COST REDUCED: 470,000.00

Effect on initial budget proposal prepared

COST ITEM	BUDGET PROPOSAL	BASED ON PROPOSALS OF SYSTEMA and COST REDUCTION EFFORTS
Systems Development including Training and Staff Capacity Building	3,900,000.00	3,140,000.00
Content Build-up	1,200,000.00	870,000.00
Preparation of Content, Records and Document that will be part of Initial Portal Build-up <ul style="list-style-type: none"> • Personnel • Materials for the inventory of content, records and documents • Reproduction Expenses 	575,000.00	425,000.00
Soft Launching, Pilot Testing and Actual Launch <ul style="list-style-type: none"> • Office Supplies • Launching with Stakeholders <ul style="list-style-type: none"> ○ Food and Venue ○ Materials for Launching (including Promotional Materials) ○ Logistics ○ Computer Rentals 	220,000.00	220,000.00
Consultant's Fees	786,500.00	786,500.00
TOTAL BUDGET ESTIMATE	6,681,500.00	5,441,500.00
In USD based on rate of (1 USD = 48.5 PHP)	137,763.00	112,196.00