



# Conducting a Needs Assessment Survey and User Requirement Study for An Electronic Phytosanitary Certification System: The Experience of Malaysia

## Project Strategy and Approach

## **1. Background and Situation Analysis**

This guidance document seeks to draw general principles and lessons learnt from the implementation of the electronic phytosanitary certification system in Malaysia. The paper outlines some of the key considerations and actions taken in conducting needs assessment surveys and user requirement studies for implementation of ePhyto in the country. Needs assessment surveys and user requirement studies are necessary, in order to provide the project development team with the information required for the design and operation of the electronic phytosanitary certification system. These studies also help the development team to determine the scope the feasibility of the project.

The objective of the user requirement surveys is to inform the team in the development and design of the electronic phytosanitary certification system. The experience of Malaysia indicates that there were some common needs and challenges for the users and stakeholders or the electronic phytosanitary certification system. However, it was also apparent that international trade in Malaysia requires more expeditious, transparent and predictable trade operations.

The initial assessments also suggested that Malaysian exporters and exporting service providers need accelerated and predictable processing times in order to further streamline their businesses.

Malaysia's Phytosanitary Certificate Issuance Offices (PCIOs) also require more transparency, in order to reduce forgery, corruption and reduce non-compliance with ISPMs including meeting the importing country's import requirements.

There was a need for a harmonised, centralised data system and real-time sharing and reporting mechanism, in order to further facilitate trade in Malaysia.

This need extends to the possibility of printing phytosanitary certificates at all PCIO locations once the phytosanitary certificate has been initially approved.

Malaysia also needed to increase its processing time in order to meet the increased demand of international trade in perishable agricultural products. An ePhyto certificate (E-cert) would help to facilitate agricultural trade in the future.

## **2. Strategic Objectives in a Conducting Needs Assessment Survey and User Requirement Study for Electronic Phytosanitary Certification Systems**

The specific objectives for this project including:

- To determine the feasibility of the online system to ensure the development and extensiveness of the system met the stakeholder requirements and that the proposed system is sustainable;
- To evaluate the available online system for trade facilitation for possible stand alone and interface or build within the available system;
- To study the present procedures for the issuance of phytosanitary certificate (PC) and determine the issues and problem related in ensuring the online system will have a

harmonised workflow and the tasks meet the obligations for the issuance of PCs and International Standard on Phytosanitary Measures (ISPM);

- To evaluate the available infrastructure and capacity building within the Phytosanitary Certificate Issuance Office (PCIO) in order to provide recommendations for upgrades and the ensure continuous functionality of the system

### **3. Project Implementation**

This section outlines the project implementation approach conducted by Malaysian project team.

#### **3.1 Establishment of Project Management Team**

The project management team will oversee the implementation and coordination of the project. The project coordination committee will be responsible for monitoring the progress of the online project, source and control the finance and setup the system development team. Where necessary they will assess the project success ensuring coordination of the project's outcomes, outputs and activities.

##### **a. Project Coordination Committee TOR**

The Committee will consist of:

- The Head of the National Plant Protection Organization (NPPO);
- Plant Quarantine Officers involved in PC issuance;
- Import control and enforcement;
- Finance Division;
- IT Division and International Division.

The system development team chairman and secretary are also the members of Coordination Committee.

##### **b. System Development Team TOR**

The system development team will be responsible for the gathering of basic background information on the needs, content and architecture of the online system.

The system development team will consist of:

- Plant Quarantine officers,
- IT experts including IT provider and Exporters.

The team will be headed by a senior plant quarantine officer.

### **4. Project Methodology**

The section outlines the methodology used to conduct the needs assessment surveys and user requirement studies.

#### **4.1 Needs Assessment Survey**

The general needs assessment survey will gather information through:

- Minutes and recommendations from international consultation meetings,
- Workshop recommendations,
- Bilateral meetings, dialogues and/or workshops with key stakeholders such as exporters, forwarding agents, port service providers, packinghouse service providers, Sanitary and Phytosanitary treatment providers. This includes
- Meetings with government agencies in the agricultural sector and
- Bilateral meetings with NPPOs of other countries.

#### **4.2 Method of Engagement for System Development**

This section presents the methods of engagement for the system development team. The team will:

1. Select the head of the ePhyto system development team from the senior plant quarantine office
  - a. This officer should have experience in attending workshop on ePhyto, involved in agriculture trade negotiation and the Commission on Phytosanitary Measures
  - b. This will facilitate the understanding of the function of National Plant Protection Organization, the Country's obligation in implementing the International Standard on Phytosanitary Measures (ISPMs), PC issuance requirements, pest reporting and non-compliance reporting and e-cert.
2. Conduct meetings and dialogues with all stakeholders
  - a) Key stakeholders include exporters associations, forwarding agencies, port service providers, phytosanitary treatment providers, packinghouse providers and Agriculture Producers/farmers
  - b) The meeting should discuss and record the problems and advantages associated with the current issuance of PC
  - c) The meeting should also discuss requirements and local constraints for application and issuance of PC through online system in term of capacity and infrastructure
3. Meet with the IT Division and present them the proposal using a simple PowerPoint presentation on the proposed issuance of PC through an online system This includes getting approval from the Division and preparing an estimated budget for the online system development with the IT Division.
4. Submit a proposal for the development of an online system to the finance Division to request for allocation and convince that the development cost and maintenance can be recovered from the fee charged to exporters for the issuance of PC

### 4.3 User Requirement Studies (URS)

The responsibility of ePhyto development team in conducting URS is to gather information for the development of a harmonised work flow and suggest the architecture for the business logic of the online system. In addition, the studies aim to ensure all PC issuance activities are included in the automatization process and if possible no face to face interactions occur with the applicants. The source of information could be gathered through;

1. Engagement with all or selected PCIO that operate at the sea, air and land border entry points for briefing on the workflow starting from the application to the issuance of the PC, the 'sequence of activities arrangement', current infrastructure and staffing;
2. Understanding the system used in processing the application such as the category of applicators i.e. individual, agents, company, producers etc., the type of commodities, the importing countries list, the volume of applications, the requirements for licensing by local or other government agencies and the approval procedures involved;
3. Understanding the Inspection procedure of commodities, compliance with SPS of the importing country, SPS treatments, source of products (plantations, small farms, accredited etc.) inspection samplings, place of inspection, integrity of the consignments, inspecting officers, import protocol, accreditation of farms, packinghouses and treatment providers;
4. Analysing current payment methods, fee structures and methods in the issuance of receipt for payments;
5. Printing of Phytosanitary Certificate (PC) including PC format, information in the PC, interviewing those who have the authority to sign the PC, security paper and the methods of collection;
6. Interviewing inspecting officers at each PCIO in the issuance of PC to understand the actual implementation on the ground;
7. Conducting team deliberations to agree on a harmonizing workflow for the issuance of PC, taking into consideration the work sequence in each PCIO, including the problems and challenges they have encountered. Results will be recorded into tabular format e.g. application, inspection, approval, payment, printing, reporting;
8. Engagement in dialogues, meetings and workshops with other key stakeholder such as exporters, forwarding agents, SPS treatment providers, Port Service providers, Government Agencies and producers/farmers on the workflow proposed by the team. Modified as necessary or in-cooperated new task in the workflow and get their agreements;
9. With the help of the IT service provider, the team should draft the architecture of the system consisting of user web browser applications, Business logic and the database. Get agreement from PCIOs;

10. Presenting the proposed online system with the project management team for comments and endorsements before proceeding to the system programming stage.

#### **4.4 System Architecture Development**

This section outlines the architecture to be adopted by the system development team. The team will:

1. Tabulate the information required to be captured or recorded in each agreed work flow for the development of their module such as application, inspection, processing, payment, printing, reporting etc.
2. List the operation to be conducted for each module above and the output expected from the system such as phytosanitary certificate/e-cert content, printing options, payment options, traceability, reporting etc.
3. Based on the information requirements and the operation activities for each module suggest and develop the webview application module taking into consideration information confidentiality and the responsibilities of the user for each application.
4. Evaluate the current online systems available in the country that have certain relationship to the issuance of PC and trade such as National Single Window, Ministry of trade online system, Ministry of Agriculture online system, online banking system etc. for possible linkage or integration.
5. Prepare the operation manual for each webview application module and operational manual for the overall online system

#### **About**

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