

## **Summary of UNNEXT Workshop on Implementation of e-SPS and Automation for Agriculture Trade Facilitation**

### **1. Workshop Conveners**

The Workshop on Implementation of e-SPS and Automation for Agriculture Trade Facilitation was successfully organized by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and was held from 1 Nov 2016 to 3 Nov 2016 in Bangkok, Thailand.

### **2. Specific Objective**

For 3 days 28 participants from 11 countries representing key stakeholders within the ministries of agriculture and regulatory agencies from the Asia-Pacific region learned about the key considerations and assessments required for implementing e-SPS certification systems, particularly for phytosanitary certificates. The participants received training from 11 experts from different intergovernmental organizations and agencies.

The overall objective of the workshop was to draw from lessons learned in order to develop a set of principles, guidelines and considerations in the development and implementation of an e-Phyto and/or e-Cert system for agricultural trade facilitation.

### **3. The Training-Workshop**

The training workshop was opened by Dr. Susan Stone, the Director of TIID ESCAP who welcomed participants and was followed by a brief presentation by Ms. Maame Agyeben and Dr. Somnuk Keretho who gave a brief background and the objectives of the workshop.

### **4. The Sessions**

#### **Session 1 Why e-SPS?**

#### **Why e-SPS? SPS issues and reform priorities in the context of the WTO TFA and SPS Agreement**

The following points were made by Dr. Kenza Le Mentec STDF (Standards Trade and Development Facility) in her presentation;

- Linkages between TFA and SPS: SPS agreement is essentially about trade facilitation i.e. about approval/inspection measures etc. *Linkages between trade facilitation and SPS agreement. See [https://www.wto.org/english/tratop\\_e/sps\\_e/tf\\_sps\\_e.pdf](https://www.wto.org/english/tratop_e/sps_e/tf_sps_e.pdf)*
- Bottleneck with SPS authorities and lack of technical assistance. Ways of support in supporting customs is the implementation of e-SPS. The absence of a general template for electronic certification is another issue; lack of standardized exchange protocol
- OIE International Standards for e-Cert (Art 5.2.4), Codex Alimentarius - also no template due to the diversity of products; International Plant Protection Convention
- Challenges: Connectivity, IT infrastructure and technical capacity; Legal and policy framework for the use and the exchange of electronic messages; Funding for development and operation of e- SPS certification systems; Buy-in of senior level government officials; Coordination between relevant agencies and stakeholders
- Standards are still emerging – UN/CEFACT e-CERT, IPPC e-Phyto

### ***Introduction to e-SPS certification: Remarks by Mr. Francis Lopez***

- The SPS Agreement relies on paper certification. IPISM no. 12 states that even sending pdf copies does not really constitute e-SPS
- The main objective of e-SPS exchange is in effect trade facilitation. This is achieved through the automation of all systems processes i.e. from application to issuance of a phytosanitary certificate.
- There has been a general trend witnessed towards UN/CEFACT e-Cert formula as an international standard/basis or template. Other trends include the adoption of digital signatures (these must have legal effect)
- Countries have also entered into bilateral SPS-agreements (competent authority to competent authority exchanges which recognise e-SPS).
- There has also been the generation of point to multi-point exchange and collaborative e-SPS exchanges in these agreements.
- One of the main challenges linked with automation is that there are no clear identifiable guidelines on process related work flows in terms of issuance, inspection, approval etc.

### ***Discussion on what is contained in the architecture of e-SPS or e-cert system***

- One of the first proposed steps is to create or maintain a database of exporters. This can also aid in creating a profile of a particular exporter.
- For further automation, the results from inspection procedures can also be lodged into that database in order to facilitate the creation of a general profile for particular agricultural product or sector e.g. cut flowers, mangosteen, etc.
- Once information is lodged in the database, an e-SPS is issued with all the relevant information such that it can be exchanged between competent authorities in a cross-border context
- Generally speaking, e-SPS can also further contribute to Import clearance facilitation. This means that there can be better validation (for example an import permit can be scrutinised next to an e-SPS certification)
- SPS certificate for transit

### **Challenges**

- One of the principal challenges highlighted was the lack of legal rules and regulations generally speaking a lack of a trade-policy framework that would allow for the implementation of e-SPS (e.g. recognition of digital signatures etc.)
- Furthermore, most countries lack sophisticated IT systems and infrastructure such as power supply and internet access etc. which would hamper the implementation of e-SPS.
- Where human capital is concerned, there is a general lack of competencies demonstrated by the issuing authorities and a general resistance to change in middle management.

## **Standards for electronic SPS and other related certificates: Introduction to e-Cert.**

The following remarks were made by Mr. Markus Pikart CITES Secretariat in this presentation;

- UN/CEFACT Standards and Guidelines (UN/CEFACT website)
- This is the principal e-Cert ‘international standard’ for agriculture recommended by FAO/IPPC and CITES
- As an international standard, the information from e-Cert can be reused in other documents e.g. CITES permits, customs declarations, invoices, transport documents.

### ***Why e-Cert and not e-SPS?***

- An e-Cert standard is a high-level description. e-Cert according to CITES is representative of a data model for many (all) agricultural certificates. A data model removes all unnecessary information for e-SPS- therefore a country can comply with other documents from other countries while allowing for adaptability in their own domestic standards and requirements.

## **Discussion on the implementation of e-SPS**

There are numerous project components involved in the implementation of e-SPS and they include but are not limited to:

1. Automation of certificate issuance: automation of all business process that are around the document (i.e. not only the phytosanitary certificate but all the other information that is required to be produced by the trader)
2. Integration with Customs and Ministry of Agriculture; this includes the integration of risk assessment etc. including the use of an electronic system to facilitate this data exchange - this refers to inter-agency cooperation within borders.
3. The collaborative exchange of e-SPS between countries: this again requires coordination of inspecting services with information and bodies in the exporting country/importing country
4. There must be an emphasis on the intelligent use of electronic information. This means that there must be a collection of information along the entire supply chain and there must be a certain degree of high level standards used in this process.

## **e-SPS and Sustainable Development**

### **The role of standards in terms of SDGs**

In a world hampered with climate change, increased population and shrinking natural resources there is in fact a demand for better quality foods, efficient and more feasible means of production etc. In the context of global food security for example there will be and there is in fact an urgent need for improved information and data exchange in a cross-border context in order to generate savings and increase transparency in the global supply chain. Automation and information

technology will help in the diversification of agricultural produce that is available in a world of limited resources.

## **Session 2: Models and technical solutions for automation of SPS procedures for developing countries**

### ***Enabling developing countries to exchange electronic phytosanitary certificates: ePhyto solution (generic system and HUB) a presentation by Mr. Shane Sela***

- With reference to the IPPC there is only one certificate
- The general standards are outlined in ISPM 7 which contains requirements and describes components of a phytosanitary certification system to be established by NPPOs and ISPM 12 which essentially lays down the requirements and guidelines for the preparation and issuance of phytosanitary certificates
- Important recent developments in 2014: the adoption of Appendix 1 of ISPM 12 is a clear movement towards e-certification (it outlines the format and contents of ePhytos, the mechanism for exchange and provides guidance on the harmonized codes and schema
- Remarked that the current challenge however is related to the idea of the HUB or the ‘HUB concept’. The HUB is a centralized server to facilitate exchange of electronic certificates between NPPOs i.e. messages are essentially delivered and stored in the HUB from NPPOs of the importing/exporting country. This requires that the rules of plugging into the HUB are a common set of rules i.e. there is a standard set of requirements in each country to facilitate collaborative exchanges across different countries.

### ***The following basic project components of the e-Phyto IPPC were discussed;***

- establishment of a service provider;
- designing of the HUB;
- piloting the HUB and GeNS
- developing and disseminating capacity; outreach; operational tools
- development of a feasible business model
- project oversight and monitoring

## **National Single Windows and Collaborative e-SPS exchange by Mr. Francis Lopez UNnext Expert**

### ***The features of an e-SPS***

- Entails the electronic/automated application including the issuance of an SPS certificate; this is achieved through online applications, verification and approval.
- There is the further electronic exchange of SPS information/data; this includes the electronic verification for import quarantine clearance.
- The exchange maintains data security and integrity of the information received.
- Important considerations include the information exchange through the transit country.

**The following important recent developments in e-Cert were discussed:**

- the adoption of UN/CEFACT e-CERT as an international standard
- e-signatures/digital signature/certificate i.e the use of PKI and data encryption to maintain data security and integrity
- numerous countries have entered into bilateral SPS agreement on the exchange from Competent Authority (export) to Competent Authority (import), i.e., point-to-point exchange
- Development of the point-to-multipoint exchange i.e. the HUB and collaborative customs e-SPS exchanges

***Discussion on the main challenges in e-Phyto systems***

- The absence of the legal, trade and administrative framework to deal with electronic issuance of permits and certificates
- there is also a lack of infrastructure and IT systems required for such certification procedures
- Where human capital is concerned there is a resistance to change;
- Questions regarding the sustainability of the system
- The competency and technical know-how of the customs agencies involved

**Issuing and exchanging e-Phyto with ASCYER: A presentation by Mr. Fabrice Millet UNCTAD and Mr. Renaud Massenet UNCTAD**

***The following items were discussed regarding UNCTAD and ASCYUDA Single Window***

- UNECE Recommendation 33 - provides inter alia that in the implementation of a single window, governments are encouraged to consider the use of existing recommendations, standards and tools that have been used by IGOs.
- ASCYUDA currently provides for cross-border data exchanges (bilaterally; through regional transit; data exchange with IGO's including ad Hoc MOUs)
- ASYCER has been developed as a component of ASCYUDA single window system. The ASYCER is a framework that is essentially designed with "empty frames". This allows malleability and adaptability for different country contexts.

***The following components of The ASCYER Portal were outlined;***

1. Reference database (outlines the requirements in different countries)
2. Financial account management system
3. Criteria: establishment of specific criteria related to particular cases of exporters/traders/products i.e. the user can specify the type of commodity; the destination country etc.
4. National importation requirements - includes product information; intended use; conditions and country of origin information etc.

5. Risk Management tools - these are generated based on the the country of origin and the specific product; the component also deals with the automatic selection of the goods to be inspected, sampled and the type of intervention
6. Authority Quantity Management Write-Off - Custom Workflow linked to ASCYER Workflow

### **ASYCER for phytosanitary certification**

- Implemented through different projects to be implemented in different ministries; provisions of know-how; source code; training the trainers; automatic exchange of information with customs.
- Deploying automated support to existing processes in terms of quarantine and phytosanitary matters

### ***A few of the following STEPS in implementation were discussed***

- This entails a critical evaluation of existing processes (perhaps through BPA Analysis in order to determine the bottlenecks and advise on recommendations)
- The programme reiterated that there is a need to be a general emphasis on the communications between exporter/ importer and the relevant NPPO
- This eventually facilitates the issuance by NPPO of certificate

### **Advantages of the ASCYER system**

- The added value of ASCYER is that it is based on an international standard. ASYCERs adaptability i.e. “empty frame” feature means that any national system with its peculiarities can plug in to such a framework. In terms of IT, it shortens the information and data requirements and there is a learning curve.

***Comments: CITES signed MOU on development of ASCYCUDA-CITES***

### **Session 3: Optimising the procedures for sanitary and phytosanitary certification**

**Dr. Somnuk Keretho UNNExT Expert**

### **Business Process Analysis and optimisation of sanitary and phytosanitary procedures**

- UNNExT BPA course and use it as a tool for analysing the ‘as-is’ business process and proposing recommendations for ‘to be’ workflows where bottlenecks are identified (UML language; use-case and activity diagrams)
- BPA Analysis: documentation of existing procedures, standard procedures, quantitative indicators leading to the provision of recommendations - in the case of trade facilitation analysis through the Buy Ship Pay model to analyse the entire supply chain
- Benefits of BPA: understanding the as-is; benchmarking with other countries; recommendations for improvement and process simplification

- BPA Process first step - inventories the process; describes the process; provides specifications for harmonisation of data and development of e-documents
- UN Recommendations 33, 18 etc.

### **How to use BPA in sanitary and phytosanitary procedures**

1. Identification of Exporter online
2. Payments made through online banking
3. Information and notification by NPPO online
4. System could include scheduling/registration of surveyors, exporters or NPPO officers
5. inspection reports made available in the system
6. Approval and issuance of e-Cert

### **Session 4: Conducting needs and feasibility assessments for automation of agricultural trade procedures**

Objective of this session was to (i) recommend a systematic approach to develop a paperless/electronic Certification System; (ii) discuss key considerations for conducting a feasibility study and (iii) discuss an approach for cost-benefit analysis

**Applying Enterprise Architecture Concept for conceptual feasibility study, detailed design, implementation and operations:** Complexity of electronic platform can be handled by decomposing its challenges into smaller and more manageable sub-components.

### **Critical components to the success of developing an electronic certification system**

1. Political Will
2. Project Management/Project Working Team
3. Adequate Budget/Financial Support
4. Business Process Analysis
5. Data/Document Simplification
6. Rules and Regulations Support
7. Application Architecture Design (and its online services) e.g. registration, online application submission, inspection scheduling, online reporting, PC issuance
8. Technical Standards and Protocols, e.g. ePhyto Schema for cross-border data exchange
9. Implementation/Construction
10. Operations

### **Inception Phase**

The purpose of the inception phase is

- **to develop a feasibility study (or a concept paper)** aiming to facilitate initial discussion on the electronic Phyto system, and
- **to obtain feedback and approval** to go forward for an in-depth design and TOR development for procurement and system construction in the later step.

### **Conducting cost-benefit analysis**

A rough cost benefit analysis can be conducted during the inception phase, but however more accurate cost-benefit analysis can be better carried during the detailed design (elaboration) phase.

## Development Cost

- Cost of feasibility study (the concept analysis)
- Cost of detailed design and TOR development
- Cost of construction/implementation
- Cost of system maintenance

## Potential Benefits

- **Cost reduction to Business Users (3-4 physical visits reduced to one visit)**
- Reduced data entry and validation activities by national plant protection organizations (NPPO) & Improving efficiencies
- Reduced potential for fraudulent certificates (if cross-border ePhyto exchange established)
- Improved security in the transmission of certificates when compared with paper certificates;
- Efficiencies in arrival and clearance of plants and plant products at the point of entry;
- Reduced delays in receiving replacement phytosanitary certificates when required;
- Potential to link with the National Single Window” initiative

## Financial Model Analysis

- Who should finance the development and operations of this platform?
- The ePhyto system is normally financed by the government because its main operations are carried by the authorized NPPO.
- The electronic ePhyto services can be free of charge or with some additional service charges to the business users.
- Clarity on the financial model by policy decision-makers is necessary to support the implementation of the system.

## Conclusions

- Mandate and continuous support from Director General
- Cost-Benefit Analysis/Financial Model analysis may help the policy makers to make the decision to go forward.
- Strong inter-division collaboration
- Systematic Project Management, e.g. detailed analysis, design and agreement on the new “to-be” business process, and effective project implementation
- Careful Change Management

## Session 5: Preparedness Assessments in practice: methods and lessons learned on

预览已结束，完整报告链接和二维码如下：

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