
Electronic Phytosanitary Certification Workshop Ottawa, Canada May 19-21, 2009

Agreed Principles and Recommendations for International Electronic Phytosanitary Certification Data Exchange:

The following nine points summarize the key agreements and recommendations resulting from the plenary session on day three of the workshop. (Additional meeting notes follow.)

1. Agreement on definition of Electronic Phytosanitary Certification;
2. All elements for electronic phytosanitary certification exchange mechanism will be derived from ISPM-12;
3. Universally accepted standards for secure certificate exchange, message format, and implementation of procedures for exchange will be used;
4. UN/CEFACT Schema (data elements, core components) must be reviewed to ensure consistency with ISPM-12 requirements and a user guide developed to include an 'ISPM-12 Overlay for the UN/CEFACT Schema' (an ISPM-12 specific schema imposing business restrictions on the UN/CEFACT Schema);
5. During transition periods in implementation, current hard-copy practices would still apply;
6. Rely on IT experts to provide advice on methods for flexible and secure electronic transfer;
7. Initiate a multilateral standardization approach rather than a bilateral approach with respect to country-to-country negotiations for exchange;
8. Engage developing countries through regional cooperation and pilot projects and use IPPC for outreach activities; and
9. Develop simple-to-understand communication pieces such as a background paper and "myth-busting" Questions and Answers.

Noted Follow-Up Action Items:

1. Raise e-cert as a priority item for agenda and workplan of next Commission of Phytosanitary Measures meeting (CPM5);
2. Establish/host a bulletin board on IPPC Website for idea exchange;
3. Establish a forum for ongoing communication and use master list of participants at this workshop as the membership basis for an international working group on electronic phytosanitary certification;
4. Establish a working group for external validation of the New Zealand draft ISPM-12 Data Map;

5. Establish an IT/business working group to review the business rules, and select a security transfer protocol (outputs will be a “business requirements document” and the selection of secure transfer protocol);
6. Establish a working group to develop a master list of botanical names, and
7. Post presentations and workshop report on NAPPO website.

Work Session Discussion and Decision Notes

On day three there was a facilitated plenary discussion to develop a common understanding and consensus on the key issues and objectives identified for the workshop. Some discussion was initiated through the review of three ISPM-12 definitions for electronic phytosanitary certification and a simple diagram illustrating government-to-government exchange of certificate data. Within this large group discussion, three break-out groups were formed to develop answers and definitions for the following three questions, which were then shared in plenary for further refinement or ratification.

1. What is electronic phytosanitary certification?
2. What is not electronic phytosanitary certification?
3. What are the requirements for an exchange mechanism for electronic phytosanitary certification?

A general consensus was achieved among participants with respect to the following definitions or points:

1. What is electronic phytosanitary certification?

Electronic phytosanitary certification is the authenticated and secure electronic transmission of phytosanitary certification data, including the certifying statement, from the National Plant protection Organization (NPPO) of the exporting country to the NPPO of the importing country.

2. What is not electronic phytosanitary certification?

- All inputs to phytosanitary certification activities outside of the definition provided above.

The following paragraph was also reviewed in plenary to ensure understanding of what electronic phytosanitary certification is not:

Text processing or other electronic generation of paper forms, which are then distributed by traditional means, is not meant by electronic certification. Neither is the transfer of an electronic version of the paper certificate. Any electronic system that facilitates the certification process **within** the exporting country - or any electronic system that facilitates the import procedures **within** the importing country - is also not electronic certification.

3. What are the requirements for an exchange mechanism (components) for electronic phytosanitary certification?

There are 2 Components for electronic phytosanitary certification:

- a. Message
 - o All elements to be derived from ISPM-12
 - o Universally accepted message format (XML is recommendation)
- b. Exchange mechanism
 - o NPPO-to-NPPO authenticated assurance (of who sent and what info is sent)
 - o Universally accepted secure procedure for exchanging certificate data (e.g. notifies, push/pull, acknowledge, etc.)
 - o Universally accepted implementation of procedure for exchange (e.g. Web services contract)

The following paragraph was further crafted in plenary

The **electronic transfer** should contain all elements that the paper certificate contains, in accordance with ISPM 12. The authenticity of the **message** certification data should be assured by electronic means. In this way it should be clear that the electronic certification data are provided and supported by the NPPO of the exporting country. The **assurance/guarantee should/will** be assured by electronic means. For this reason, the electronic transfer should be in a protected way such that the data cannot be changed or read by any party during transfer. To facilitate communication, this transfer can best be done in a standardized format. For this purpose, the XML format, following an XML schema, is strongly recommended. A proposed XML schema is presented on the IPP portal.

In the remaining time of the plenary work session, the participants collectively addressed a series of additional questions. The notes below provide a record of the discussions and agreements:

DO WE NEED A BACKGROUND DOCUMENT ON WHAT PHYTOSANITARY ELECTRONIC CERTIFICATION IS?

Discussion points:

- NAPPO panel has created vision document – could be revised/used for discussion/background document for a more global vision
- What/who would be audience for such? (IT, plant protection persons, both?)
- What is to be achieved with this?
 - o Could be used by NPPOs to provide to own IT persons
- Need simple-to-understand communication pieces for stakeholders, public, industry

WHAT DO WE NEED TO DO TO MAKE ELECTRONIC CERTIFICATION WORK?

i. CHOOSE/DEVELOP A SCHEMA

Discussion points:

- Off the shelf or develop?
- Schema are available – existing generic ones can be taken and improved/modified – more plant specific
- Existing schema: UN/CEFACT (generic – multiple business lines) or NAPPO?
 - UN/CEFACT data elements would need to be restricted, not modified - picking only those elements needed for plant
 - There is an iterative process for UN/CEFACT schema development
- Important to be able to impose business rules

Agreements:

- UN/CEFACT data elements would need to be restricted, not modified - picking only those elements needed for plant
- If using UN/CEFACT core components as the basis, use the SPS schema (overlay/compare) to identify unclear data elements to meet ISPM-12 requirements (IT needs this as well)
- Develop ISPM-12 Overlay for the UN/CEFACT Schema

ii. CONFIRM DATA ELEMENTS RE: ISPM 12 (AND ISPM 7 RE: CANCELLING /REPLACING PHYTOSANITARY CERTIFICATES)

Discussion points:

- Do they exist? Are they clearly known? Do they need describing?
 - YES they exist
- Canceling and reissuing capacity? Acknowledgment?
 - ISPM-7 requirements - some are unclear for e-cert (e.g. re-export, how do we adopt the paper process into e-cert environment – transitional questions)

iii. FLEXIBLE, SECURE TRANSFER OF MESSAGE

Agreement:

- Acceptance of above-noted definition for electronic phytosanitary certification

iv. CONSIDER IMPORT PERSPECTIVE

Discussion points:

- See point on ISPM-7 above
- Need to build in capacity to receive
- Two-way exchange principle (refer to definition of electronic phyto-certification above)

v. DEVELOPMENT IN MODULE FORMAT

Discussion points:

- How to confirm authenticity of documentation in transition period?

Agreements:

- Current hard copy practices would apply.
- During transition period, share experiences, challenges and best practices with other NPPOs

vi. ENSURE FLEXIBLE, SECURE TRANSFER

Discussion points:

- Ensure NPPO needs are met
- Is there another way to ensure message has not been tampered with and originated with exporting NPPO?
- Will everyone use digital signature?

Agreement:

- Let IT experts advice on solutions.
 - Keep it simple

vii. BILATERAL VS. MULTILATERAL APPROACH

Discussion points:

- MULTILATERAL approach because:
 - Avoids negotiation of multiple agreements
 - Cost savings
 - Leads to easier implementation

Agreement:

- Initiate multilateral standardization

viii. MORE COUNTRIES INVOLVED – HOW TO ASSIST DEVELOPING COUNTRIES TO GET STARTED

Discussion points/agreements:

- Regional cooperation
- Partnering
- Pilot projects for experimentation (doing a pilot with agreed multilateral standardization of business elements/rules)
- Focus on outreach opportunities with IPPC
 - IPPC portal provides a mechanism - registry of countries

ix. PARALLEL PAPER AND ELECTRONIC CERTIFICATION

Discussion points/agreements:

- Acknowledged necessary practice
- CANNOT have two “**original**” certificates

- will have just one official document leaving system, either paper or electronic
- Two **sets** of certificate data (1-electronic, 1-paper) need to be accurate and authentic (process must be clearly laid out in requirements documentation)
- Important element for background paper

x. **'MYTH BUSTING' and KEEPING IT SIMPLE**

- Myth: Some countries fear that e-cert will become an obligation
- Myth: money savings?
- Myth: E-cert is the “whole enchilada” (whereas participants have agreed that e-cert is only the secure, electronic exchange of certificate data - see agreed definition above)

xi. **WHAT SHOULD BE INCLUDED IN WORKSHOP REPORT? (FOR OUR USE / FOR IPPC?)**

Presentations

- e-versions will be posted to NAPPO site
- also include updated version of NZ initial draft ISPM-12 XML Data Map V.3
- Also include other docs produced by NAPPO e-cert panel

Summary of previous points

- To be cleaned up and included in report

General recommendations

- Report from this meeting will be used as background info for next CPM
- Recommend this be given high priority at next CPM (Put more emphasis on e-cert in CPM workplan)
- Countries need to emphasize priority at CPM

Specific recommendations (e.g. ISPM 12 Appendix text?)

- See “agreements” above

xii. **FOLLOW-UP ACTIONS**

- **Develop User Guide for schema**
 - already underway by TBG-18
- **Prepare proposals for CPM on next steps** for development of this process and who will participate
- **Establish/host a bulletin board on IPPC Website** for idea exchange (David Nowell)
- **Establish master list of participants** here to be provided follow-up info
- **ESTABLISH A WORKING GROUP FOR EXTERNAL VALIDATION OF NZ DRAFT ISPM-12 DATA MAP**

Volunteered members:

- Jason Dittrich, US (will act as COORDINATOR)
- Corinne Balasa, Canada
- Martin Boerma, Netherlands

- Adriana Silvia Utges, Argentina
- Patrice Sinave, Canada
- Roberto Betanzos, Mexico
- China representative (China to contact Jason to confirm who)
- Taiwan representative (Taiwan to contact Jason to confirm who)
- Brazil representative (Brazil to contact Jason to confirm who)

*NOTE: This group could also examine the **usability** of ISPM-12 Data Map*

ESTABLISH AN IT/BUSINESS WORKING GROUP TO REVIEW THE BUSINESS RULES, AND SELECT A SECURITY TRANSFER PROTOCOL

- This is an IT area of expertise but has a big impact on business
- IPPC needs info on what is to be included
 - to be notified via CFIA/NAPPO on results of this workshop

Scope of IT/Business Working Group to include:

- Scan ISPM-7 and develop electronic equivalents for procedures
- Identify transitional problems and propose recommendations for future revision of ISPM-12
 - Blank appendix 2 for ISPM-12 offers possible placement for recommendations
- Reference the points from “requirements for an exchange mechanism for electronic phytosanitary certification” (above)
- Develop brief document for comment by broader group

Volunteered members:

- Corinne Balasa, Canada (IT LEAD)
- Christian Dellis, USA (BUSINESS LEAD)
- NZ representative
- NL representative
- US representative
- China representative
- Mexico representative

- **DEVELOP MASTER LIST OF BOTANICAL NAMES AND WORKING GROUP TO ADDRESS IT**
- PCIT has a list and US agrees to share it with other countries for review and refinement, the US will also share the list of plant parts (commodity types) from PCIT (Christian D will zip and send to other group members)
- These countries also have lists and have agreed to share them:
 - Brazil
 - Argentina
 - Chile
 - China
 - Taiwan

- It was also discussed that this review could be an activity undertaken by the **Working Group for the External Validation of NZ Draft ISPM-12 Data Map** noted above
- Categorization of commodities: check lists in standards (End-use/intended-use)

WHAT SHOULD FORUM BE FOR ONGOING COMMUNICATION?

- Use the participant list of this meeting as basis for establishment of an international working group on electronic phytosanitary certification

WHAT HAVE WE MISSED?

- Timelines for activities noted above
- Name, membership (essential to name chairperson and secretary) and executive and general guiding principles (terms of reference) of the international working group to emerge from this meeting.

Suggested APPENDIX to ISPM 12 on electronic certification

What is electronic phytosanitary certification

Electronic phytosanitary certification is the communication of the certification data including the certifying statement, from the NPPO of the exporting country to the NPPO of the importing country by electronic means. These data now normally appear on a paper phytosanitary certificate that is signed and stamped.

What is not electronic phytosanitary certification

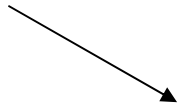
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Requirements for electronic phytosanitary certification

The electronic transfer should contain all elements that the paper certificate contains, in accordance with ISPM 12. The authenticity of the certification data should be assured by electronic means. In this way it should be clear that the electronic certification data are provided and supported by the NPPO of the exporting country. The guarantee given by the certificate should be assured by electronic means. For this reason the electronic transfer should be in a protected way such that the data can not be changed or read by any party during transfer. To facilitate communication this transfer can best be done in a standardized format. For this purpose the XML format, following an XML schema, is strongly recommended. A proposed XML schema is presented on the IPP portal.

Exporting Country

1. Certification process
(Inspection, testing)



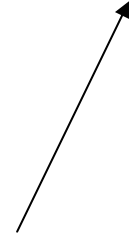
2. Issuance of Certificate

3. CERTIFICATE

**3. SENDING
CERTIFICATE DATA**

Importing Country

5. Import procedures
(inspection, release)



4. Receipt of Certificate (Data)