

ePhyto

Electronic phytosanitary certification An introduction

IPPC ePhyto Steering Group



ePhyto

Background

- IPPC ePhyto Steering Group
- Basics of ePhyto
- IPPC Harmonisation of ePhyto
- ISPM 12
- ePhyto website





led by the 8th session of the (M) to provide **oversight**,
tate the international
ation among contracting




- Peter Neimanis (Southwest)
- Diego Quiroga (Bureau mem)
- Craig Fedchock (IPPC Secret)
- Josiah M. Syanda (Africa regi)
- Marie-Pierre Mignault (IPPC)



Exporting country

Importing country

Paper certificate




National System
Export
Certification

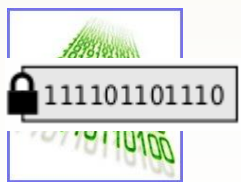
Trade

National system
import

Electronic certificate




National System
Export
Certification



111101101110


Certificate number

National system
import

Trade

Paper certificate

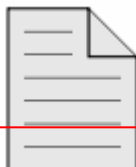


National System
Export
Certification

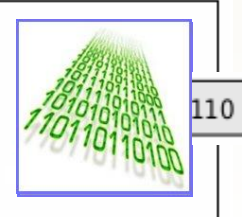
Trade

National system
import

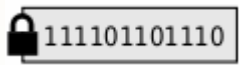
Electronic certificate (ePhyto)

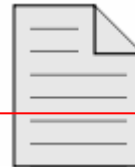


National System
Export
Certification



ePhyto system






National system
import

Exporting country

Importing country

Paper certificate

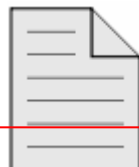


National System
Export
Certification


Trade

National system
import

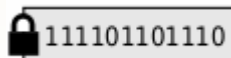
Electronic certificate (ePhyto)



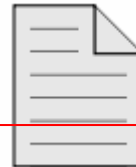
National System
Export
Certification



110



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National system
import

National system

Exchange

National system

eCert and ePhyto

eCert is the general term used for electronic certification

eCert can be veterinary, phytosanitary, food safety

ePhyto is a specific term used for electronic phytosanitary certification

ePhyto follows the harmonisation as agreed by the IPPC and described in ISPM 12, Appendix 1

ePhyto

An electronic phytosanitary certificate.

Is NOT a copy or a pdf of a printed phytosanitary certificate that is emailed.

Is a secured data set using standardized format for secure transmission electronically between NPPO of exporting country and NPPO importing country

Is the equivalent of a paper phytosanitary certificate and may be used if accepted by the NPPO of the importing country.



Benefits harmonized ePhyto

- reduce fraud
- reduce data entry (reuse data)
- reduce costs (printing, shipping, sorting, distribution, archiving)
- expedite communication between NPPOs
- improve security
- improve planning for inspection
- reduce delays replacement certificates
- link into 'single window' initiative



Harmonisation ePhyto essential

- Several countries started phytosanitary eCert
- Similar approach, same starting point, but different solutions
- Global exchange of ePhytos does not work with different solutions
- Move from bilateral exchange to global exchange, global harmonisation is needed
- IPPC is the right place to harmonize



ISPM 12 Appendix 1

Electronic phytosanitary certificates,
information on standard XML
schemes and exchange mechanisms

- Adopted in 2014
- Standardisation of:
 - format of message (UN/CEFACT schema and mapping)
 - contents of message (terms and codes)
 - exchange mechanism (authentication and security)



This appendix was adopted by the Ninth Session of the Commission on Phytosanitary Measures in April 2014.
This appendix is for reference purposes only and is not a prescriptive part of the standard.

APPENDIX 1: Electronic phytosanitary certificates, information on standard XML schemes and exchange mechanisms (2014)

Introduction

Electronic phytosanitary certificates are the electronic equivalents of phytosanitary certificates in paper form and may be used if they are accepted by the national plant protection organization (NPPO) of the importing country. When electronic phytosanitary certificates are issued by the NPPO of the exporting or re-exporting country, they should be made directly available to the NPPO of the importing country.

All the requirements and procedures in this standard apply to electronic phytosanitary certificates.

When using electronic phytosanitary certificates, NPPOs should develop a system for the issuance, transmission and receipt of electronic phytosanitary certificates that uses Extensible Markup Language (XML), standardized message structure and contents, and standardized exchange protocols.

This appendix provides guidance on these elements and refers to a page on the IPPC website (<http://ePhyto.ippc.int>) that provides links to further details – both IPPC and external websites and documents – on the information contained in this appendix. These links are referred to in the text as

Electronic phytosanitary certificates


- Same wording and data as paper certificates
- Including certifying statement
- Transmitted from NPPO to NPPO
- Authenticated (be sure who is sender)
- Secure transmission (no changes during transmission)

1 Name and address of exporter:	2
	PHYTOSANITARY CERTIFICATE
	No. EC / NL /
3 Declared name and address of consignee:	ORIGINAL
	4 Plant Protection Organization
	to Plant Protection Organization:
	5 Place of origin
ORIGINAL	
4 Plant Protection Organization of the Netherlands	

1	PHYTOSANITARY CERTIFICATE
	No. EC / NL /
	07107805
ORIGINAL	

7 Declared point of entry	agriculture, nature and food quality	9 Quantity declared
8 Distinguishing marks, number and description of packages; name of product (botanical name of plants)		

<Name>Phytosanitary certificate<Name>
 <ID>EC/NL/04026805<ID>
 <IssueDateTime>2011-07-20<IssueDate Time>
 <IssuerSPSparty>
 <Name>Plant Protection Organization of the Netherlands<Name>
 <RecipientSPSparty>
 <Name>APHIS<Name>
 <Description>Cut flowers<Description>
 <ScientificName>Rosa spp.<ScientificName>



For details with regard to this certificate, please contact the competent authority in the country of origin.



ePhyto

[Background Documents](#)

Link No.	Subject	Link URL (links to be used in documents or articles)
Formats		
1	WC3 Extensible Markup Language (XML)	http://ephyto.ippc.int/XML
2	UN/CEFACT SPS XML Schema	http://ephyto.ippc.int/UN-CEFACT-schema
3	IPPC ePhyto certificate for export	http://ephyto.ippc.int/Export
4	IPPC ePhyto certificate for re-export	http://ephyto.ippc.int/Re-export
5	IPPC replacement of phytosanitary certificates	http://ephyto.ippc.int/ReplacementPC
Harmonized Terms		
6	ISO two-digit country	http://ephyto.ippc.int/ISO-country
7	Database of scientific names	http://ephyto.ippc.int/EPPO-codes
8	IPPC commodity class	http://ephyto.ippc.int/Commodities
9	UNECE recommendation 21 (packages and packaging materials)	http://ephyto.ippc.int/UNECE-recommendations
10	UNECE recommendation 20 (units of measure used in international trade)	http://ephyto.ippc.int/UNECE-recommendations
11	IPPC treatment types	http://ephyto.ippc.int/Tmt-types
12	Codex active ingredients	http://ephyto.ippc.int/Codex-ai
13	UNECE recommendation 20 (concentration, dosage, temperature and duration of exposure)	http://ephyto.ippc.int/UNECE-recommendations
14	IPPC additional declarations	http://ephyto.ippc.int/AD
15	UN/LOCODE for Trade and Transport Locations	http://ephyto.ippc.int/UN-LOCODE-locations
16	UNECE recommendation 19, Codes for modes of transport	http://ephyto.ippc.int/UNECE-recommendations
Exchange Mechanism		



ePhyto Factsheet #1

Terms of Reference for the ePhyto Steering Gr

Background

At its 8th session, the Commission on Phytosanitary Measures (CPM) recognized the need for a programme to promote and provide guidance on the development of ePhyto information and tools for those countries that opt for an ePhyto system.

This need is identified as urgent. Agreement on the key elements and framework that will enable countries that wish to use ePhyto systems should be delivered within 18 months of the start of the programme.

- the timely adoption of Appendix 1 to ISPM 12 at CPM 12
- the number of countries already independently developing ePhyto systems that may not be compatible with each other and who are arranging for bilateral electronic exchange of phytosanitary certificate information with trading partners
- the development of single windows and customs procedures for receipt of electronic information relating to trade

Purpose

The purpose of the ePhyto Steering Group is to provide expert guidance and advice on IPPC efforts to facilitate the international exchange of electronic phytosanitary information among contracting parties.

Duration

The ePhyto Steering Group will remain an active group until the end of its programme of work or be reviewed after 3 years.

Membership

The ePhyto Steering Group will be composed as follows:

- (1) Bureau member
- (1) expert nominated from each of the IAD Region
- a Chair will be selected from their membership.

ePhyto Factsheet #2

ePhyto Steering Group Newsletter

A word of welcome from the Chair – Nico Hor

"The IPPC ePhyto Steering group has the very challenging task to harmonize electronic phytosanitary certification at least to the level of the IPPC. I have done this with paper phytosanitary certificates. I honour for me to chair this group with representatives from all regions and to contribute as group to worldwide harmonization of ePhyto for NPPOs. The Steering Group coordinates this work with assistance from NPPOs and experts from all over the world. It would be my pleasure to keep you informed and involved."

ePhyto Steering Group

The IPPC ePhyto Steering Group was established by the 8th session of the Commission on Phytosanitary Measures (CPM) to commence its work and to assist countries with their implementation.

The first face-to-face meeting of the group took place in Auckland, New Zealand from 16 to 19 September 2013.



The ePhyto Steering Group is composed of (left to right):

- Walter Fabian Alessandrini (Latin America, Argentina)
- Christian B. Dettl (North America region, United States of America)
- Chen Maoyu (Asia region representative, China)
- Peter Neimanis (Southwest Pacific region, Australia)
- Nico Hor – chair (Europe region, The Netherlands)
- Peter Thomson (Bureau member, New Zealand)
- Craig Fedcheck (IPPC Secretariat)
- Serafin Ernesto Mangana (Africa region, Mozambique)

After reviewing the group's Terms of Reference, presentations were given by several participants to demonstrate ePhyto systems in their respective countries.

ePhyto Factsheet #3

What is an ePhyto?

ePhyto is short for "electronic phytosanitary certificate".

An ePhyto is the electronic version of the information contained in a phytosanitary certificate.

All the information contained in a paper phytosanitary certificate is also detailed in the ePhyto.

ePhytos can be exchanged electronically between countries or the data printed out into a paper-based phytosanitary certificate.

ePhytos should be produced in accordance with ISPM 12 and its Appendix 1. ePhytos contain phytosanitary data in XML format.

What is XML?

Extensible Markup Language (XML) is an internationally recognised language used to produce documents in a format that is both human-readable and machine-readable.

XML is a textual data format that is standardized to allow communication between different computer systems and usability over the Internet.

XML is widely used and has come into common use for the interchange of data over the Internet.

How do ePhytos compare with paper phytosanitary certificates?

The ePhyto is equivalent to the traditional paper-based phytosanitary certificate. The contents of an ePhyto can be directly related to the elements of a paper-based phytosanitary certificate.

Comparison of paper and electronic certificates

Certificate type	Paper	Electronic
Phytosanitary certificate	Certificate data in hard copy, stamped and signed	Certificate data in XML format, authorized and encrypted
Copy certificate	Photocopy or pdf of certificate	Printout or viewer (web or pdf) or Certificate data in XML format
Certified copy	Copy certificate stamped, dated and countersigned	Printout of certificate data, stamped, dated, countersigned, or Certificate data in XML format, re-encrypted

Benefits of ePhytos

The use of a single global standard, ISPM 12:2011 (Phytosanitary Certificates), for electronic phytosanitary certification (ePhyto) provides a number of benefits, in comparison to paper-based phytosanitary certification, to both exporting and importing countries:

- reduce possibilities for fraudulent documentation
- reduce data entry and validation functions by NPPO staff
- improve security in transmission of certificate documentation
- improve planning for the arrival and clearance of plants and plant products at customs
- reduce delays in receiving replacement phytosanitary certificates
- maximize the investment by building on existing initiatives
- reduce ongoing and costly bilateral arrangements
- ability to link into the World Customs Organization "One Window" initiative and harmonize codes and processes