



Plant Protection Service
*Ministry of Economic Affairs, Agriculture and
Innovation*

Electronic certification status of developments

Nico Horn
Team Manager International Affairs
Netherlands Plant Protection Service



Contents

1. History
2. What is electronic certification
3. What is not electronic certification
4. ISPM 12
5. What is needed for global ePhyto
Language, message format, security
6. Current status



1. History

- Discussions at CPM meetings
- EPPO Panel 2005
- IPPC workshop 2006 in the Netherlands
- IPPC/NAPPO workshop 2009 Canada
- Revised ISPM12
- IPPC workshop June 2011, Korea



Plant Protection Service
*Ministry of Economic Affairs, Agriculture and
Innovation*

2. What is electronic certification?

- Based on discussions in Canada in 2009
- Based on discussions in Seoul in June 2011
- Already partly described in revised ISPM 12

EXPORTING COUNTRY

**1. Certification
proces**
(inspection, testing)

**2. ISSUANCE OF
CERTIFICATE**

3. CERTIFICATE

**3. SENDING
CERTIFICATE
DATA**

5. Import procedures
(inspection, release)

**4. RECEIPT OF
CERTIFICATE
DATA**

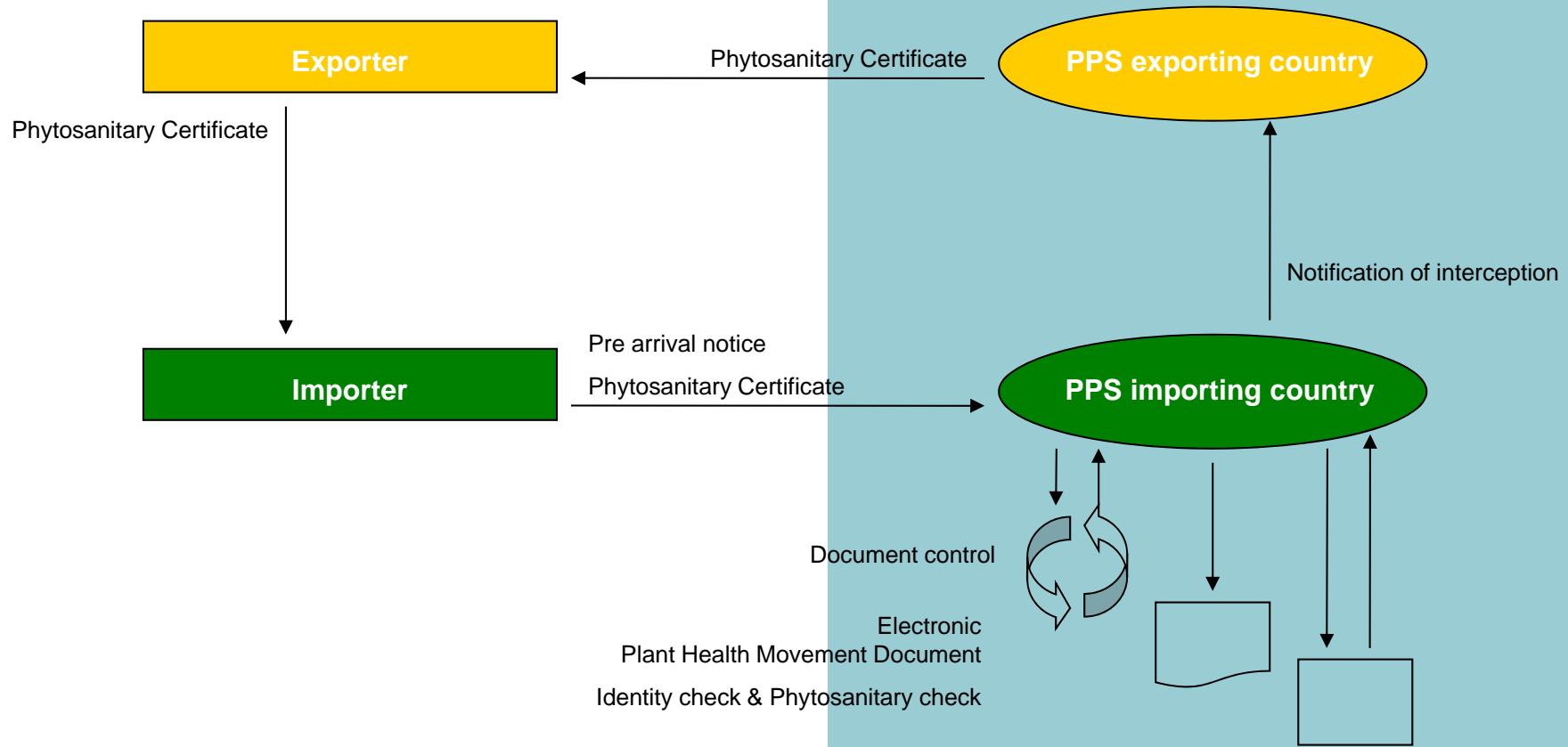
IMPORTING COUNTRY



Plant Health certificate



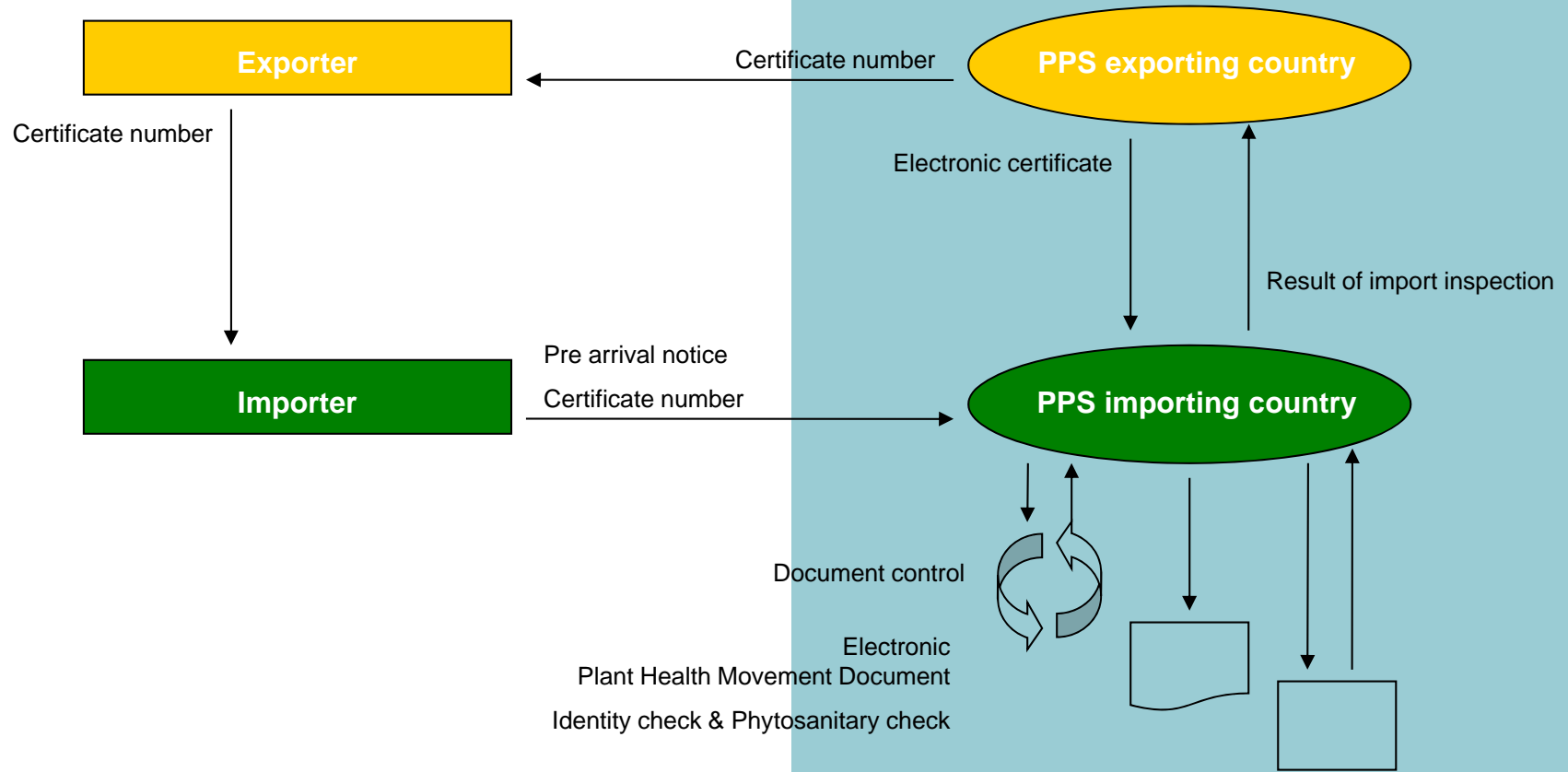
Plant Protection Service
Ministry of Economic Affairs, Agriculture and
Innovation



Plant Health certificate



Plant Protection Service
Ministry of Economic Affairs, Agriculture and
Innovation





Plant Protection Service
Ministry of Economic Affairs, Agriculture and
Innovation

*Electronic phytosanitary certification is the **secure and authentic transmission** of phytosanitary certification data, including the certifying statement, **from the NPPO of the exporting country to the NPPO of the importing country by electronic means.***



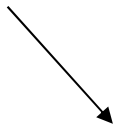
Plant Protection Service
*Ministry of Economic Affairs, Agriculture and
Innovation*

3. What is NOT electronic certification

- Text processing or other electronic generation of paper forms
- Transfer of electronic version of a paper certificate (e.g. pdf)
- National electronic system to facilitate certification
- National system to facilitate import process

EXPORTING COUNTRY

**1. Certification
proces**
(inspection, testing)

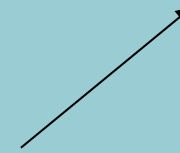


**2. ISSUANCE OF
CERTIFICATE**

**3. SENDING
CERTIFICATE
DATA**



5. Import procedures
(inspection, release)



**4. RECEIPT OF
CERTIFICATE
DATA**

IMPORTING COUNTRY



4. ISPM 12 revised version 2011

- Phytosanitary certificates can be in paper form or, where it is accepted by the NPPO of the importing country, in electronic form
- NPPOs may use electronic phytosanitary certificates, using standardized language, structure of the message and exchange protocols
- APPENDIX 1: Electronic certification, information on standard XML schemas and exchange mechanisms [*Under development*]
- Mechanism preferably based on technical input from UN/CEFACT

IPPC workshop Seoul June 2011



Plant Protection Service
*Ministry of Economic Affairs, Agriculture and
Innovation*

- 50 participants
- from 23 countries
- Covering the whole world
- From Europe: NO, UK, BE, NL
- IPPC and NAPPO secretariat present
- Good mix of NPPO en IT experts
- Constructive and fruitful discussions
- Steps forward
- Right time for harmonisation



5. What is needed for global electronic certification?

- a. Language
- b. Harmonisation of message format
- c. Harmonisation of message contents (codes)
- d. Transfer mechanism
- e. Security and authenticity



a. Language: XML

- eXtensible Markup Language
- Designed for data transfer over internet
- Already in ISPM12

XML example



Plant Protection Service
*Ministry of Economic Affairs, Agriculture and
Innovation*



```
<contacts>
<contact><name first name="Peter" family name="Jansen" />
  <address>
    <street>Dorpsstraat</street>
    <number>2</number>
    <addition>C</addition>
    <postal code>1043AB</postal code>
    <city>Amsterdam</city>
  </address>
<telephone>020-1234567</telephone>
</contact>
<contact>< name first name ="Klaas" family name ="Bruin" />
  < address >
    <street>Polderplein</street>
    < number >98</ number >
    <postal code>2132BA</postal code>
    <city>Hoofddorp</city>
  </ address >
<email>klaas@hotmail.com</email>
</contact>
</contacts>
```

b. Message format XML Schema



Plant Protection Service
*Ministry of Economic Affairs, Agriculture and
Innovation*

- The structure of the XML message
- What elements are in the schema
- What is the name of the elements
- What is meant by each element
- How do we describe the element
- Coverage of all ISPM12 elements

1 Name and address of exporter		2 PHYTOSANITARY CERTIFICATE No. EC / NL / 	
3 Declared name and address of consignee		4 Plant Protection Organization of the Netherlands to Plant Protection Organization(s) of	
6 Declared means of conveyance		5 Place of origin	
7 Declared point of entry		 agriculture, nature and food quality	
8 Distinguishing marks, number and description of packages; name of product (botanical name of plants)		9 Quantity declared	
10 This is to certify that the plants, plant products or other regulated articles described herein: — have been inspected and/or tested according to appropriate official procedures, and — are considered to be free from the quarantine pests specified by the importing contracting party, and — are considered to conform with the current phytosanitary requirements of the importing contracting party, including those for regulated non-quarantine pests.			
11 Additional declaration			
DISINFESTATION AND/OR DISINFECTION TREATMENT 12 Treatment 13 Chemical (active ingredient) 14 Duration and temperature 15 Concentration 16 Date 17 Additional information		18 Place of issue Date: Name of authorized officer: Stamp of Organization:	

Plant Protection Service
Ministry of Economic Affairs, Agriculture and
Rural Development

<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>

UN/CEFACT Schema



Plant Protection Service
*Ministry of Economic Affairs, Agriculture and
Innovation*

- For SPS issues
- UN/CEFACT standaard schema
- UN/CEFACT: Centre Trade facilitation and e-business
- This Schema will be used for phytosanitary field (ISPM12 proof)
- Agreement needed on exact use of fields

c. Harmonisation contents: CODES



Plant Protection Service
*Ministry of Economic Affairs, Agriculture and
Innovation*

- Why codes?
 - Avoids mismatches by typing errors
 - Unambiguous spelling of names etc.
 - Language independent
 - Makes digital checks possible
 - Full use of electronic system possible
 - More efficient

c. CODES



Plant Protection Service
*Ministry of Economic Affairs, Agriculture and
Innovation*

- Country codes
- Botanical names plants
- Scientific names pests
- Commodity Classes
- Treatments
- Additional declarations?

d. Exchange mechanism



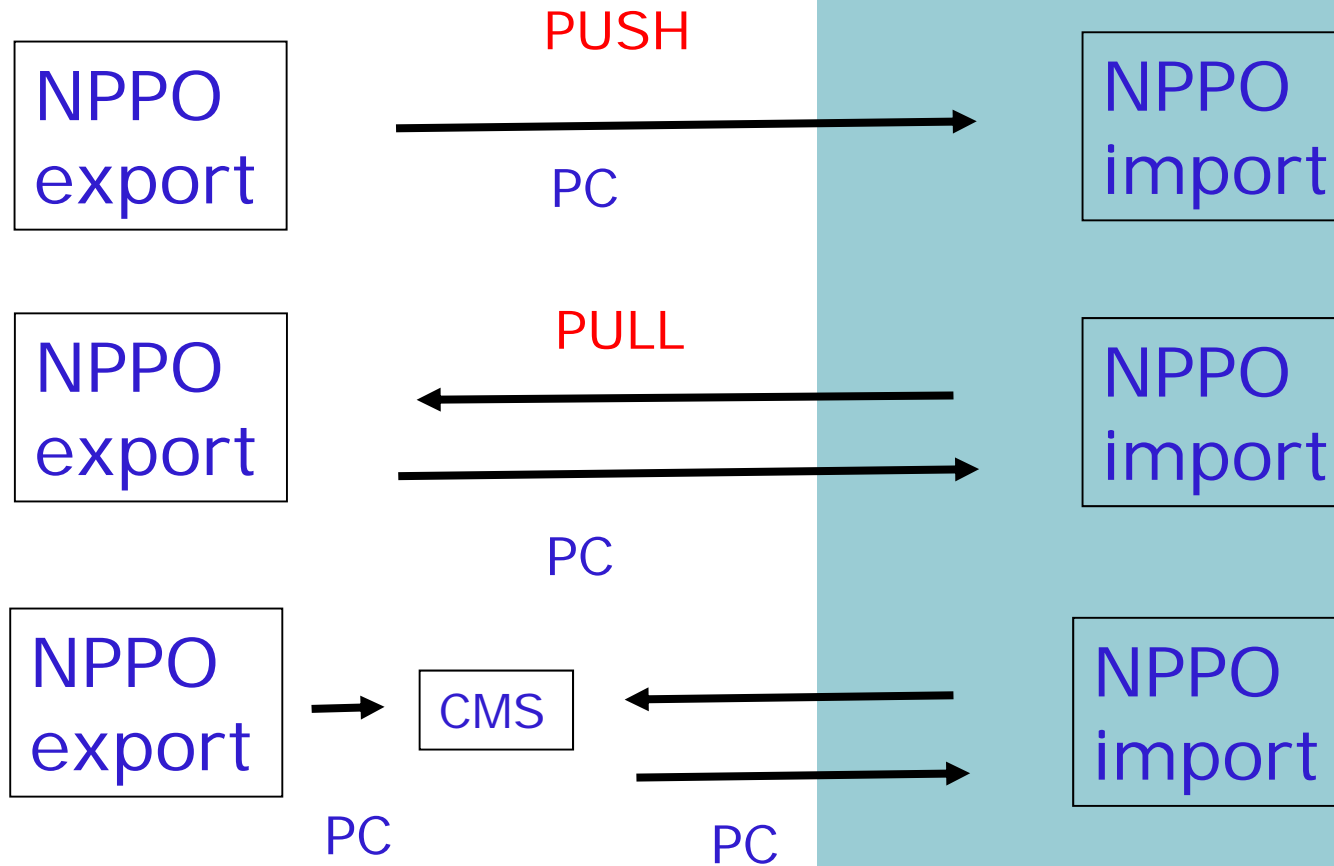
Plant Protection Service
*Ministry of Economic Affairs, Agriculture and
Innovation*

- Security
 - No changes to the certificate after issuance
- Authenticity
 - Is the received certificate from the NPPO?
- "Push" or "pull"
 - Send the certificate or collect it?
- Acknowledgement of receipt

PUSH or PULL






Plant Protection Service
Ministry of Economic Affairs, Agriculture and
Innovation



e. SECURITY

Paper Certificate

- Value paper
- Water mark
- Stamp
- Signature

1 Name and address of exporter		2 PHYTOSANITARY CERTIFICATE No. EC / NL /  ORIGINAL 03107805	
3 Declared name and address of consignee		4 Plant Protection Organization of the Netherlands to Plant Protection Organization(s) of	
		5 Place of origin	
6 Declared means of conveyance		 agriculture, nature and food quality	9 Quantity declared
7 Declared point of entry			
8 Distinguishing marks, number and description of packages; name of product (botanical name of plants)			
10 This is to certify that the plants, plant products or other regulated articles described herein: — have been inspected and/or tested according to appropriate official procedures, and — are considered to be free from the quarantine pests specified by the importing contracting party, and — are considered to conform with the current phytosanitary requirements of the importing contracting party, including those for regulated non-quarantine pests.			
11 Additional declaration			
DISINFESTATION AND/OR DISINFECTION TREATMENT		18 Place of issue	
12 Treatment		Date: Name of authorized person	
13 Chemical (active ingredient)	14 Duration and temperature	 A. L. M. Van Holstein	
15 Concentration	16 Date		
17 Additional information		(Signature)	

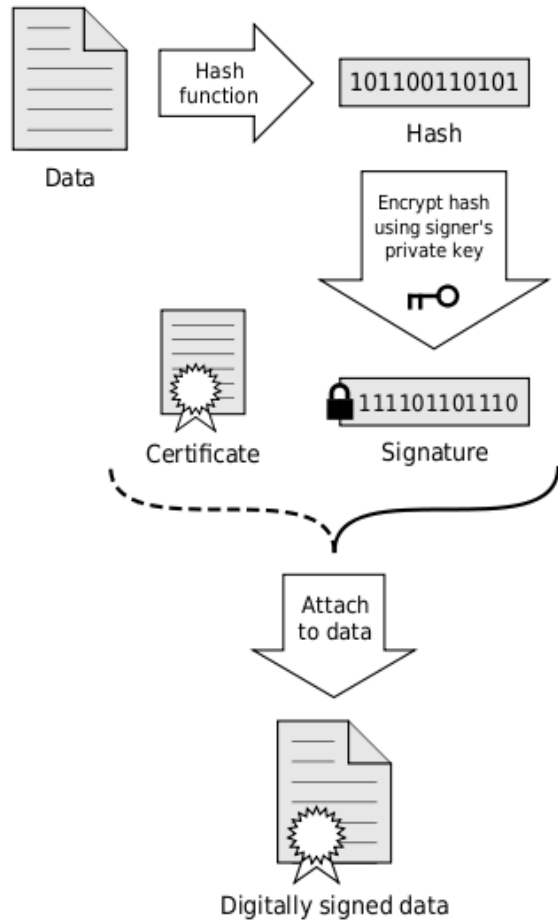
PD certificate number 2212

No stamp or label with respect to this certificate shall attach to the plant products or regulated articles of this certificate in any of the offices or establishments.

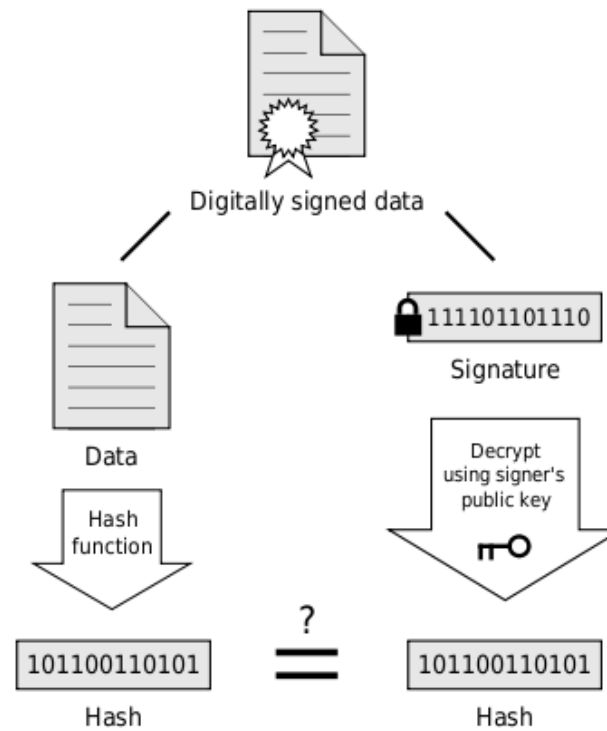
e. SECURITY



Signing



Verification



If the hashes are equal, the signature is valid.

Current status

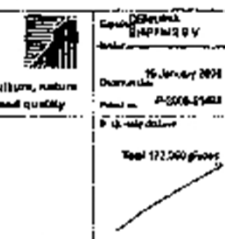



Plant Protection Service
*Ministry of Economic Affairs, Agriculture and
Innovation*

- Result from Korea meeting: Working groups
- WG1 XML schema
- WG2 Code lists
- WG3 Security and authenticity
- Come up with proposals by end of 2011
- Proposals through IPPC approval process
- Immediately use in pilots
- Push or Pull up to countries, no need to harmonize



QUESTIONS?

1. Name and address of exporter: Bloeyen/LaMotte Ceder, Jan van Goy. 4331 PA, ZWETHEERT 1100 NETHERLANDS		2. PHYTOSANITARY CERTIFICATE No. EC / NL / 0000000000	
3. Name and address of importer: JAV Apple Tree Production 2250 The Wood Drive W.R. Rd. WAINIPUNI, ON M9B 2Y0, CANADA		4. Plant Product Description of the Dutch product: In full botanical description of: 001 Apple 002 Apple The total weight: 172,000 grams	
5. Treatment process (if any) (name of the product): No treatment		6. Date of issue: 16 January 2008 7. Validity: 21st January 2009	
8. Description of the product: 400 TONNES AND QUANTITY: 172,000 pieces fresh weight MALUS M 8 10,000 pieces fresh weight MALUS EVEREST 10,000 pieces fresh weight MALUS GOLDEN HORNLEY 100,000 pieces in plastic coated MLO11 HT 08 0,000 pieces in plastic bag		9. Signature and stamp of the competent authority: 	
10. Remarks: - see general to this Model form - see also the instructions to the importer/consignee in the accompanying document (if any) - in case of a dispute, the importer/consignee shall be responsible for the goods until they are cleared (if possible) - see also the instructions to the importer/consignee in the accompanying document (if any)			
11. Declaration of the exporter: I hereby declare that the product is free from pests and diseases and that it complies with the requirements of the phytosanitary certificate. I am aware that I am responsible for the product until it is cleared (if possible).			
12. Declaration of the importer: I hereby declare that I am aware of the requirements of the phytosanitary certificate and that I am responsible for the product until it is cleared (if possible).			
13. Signature and stamp of the competent authority: 		14. Date of issue: 16 January 2008	