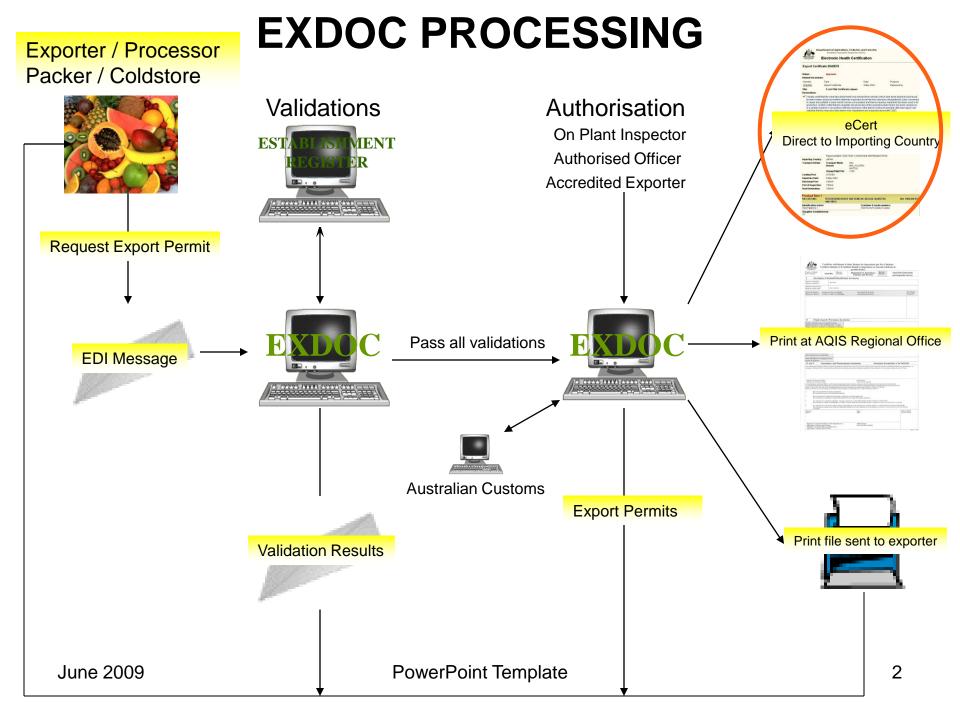
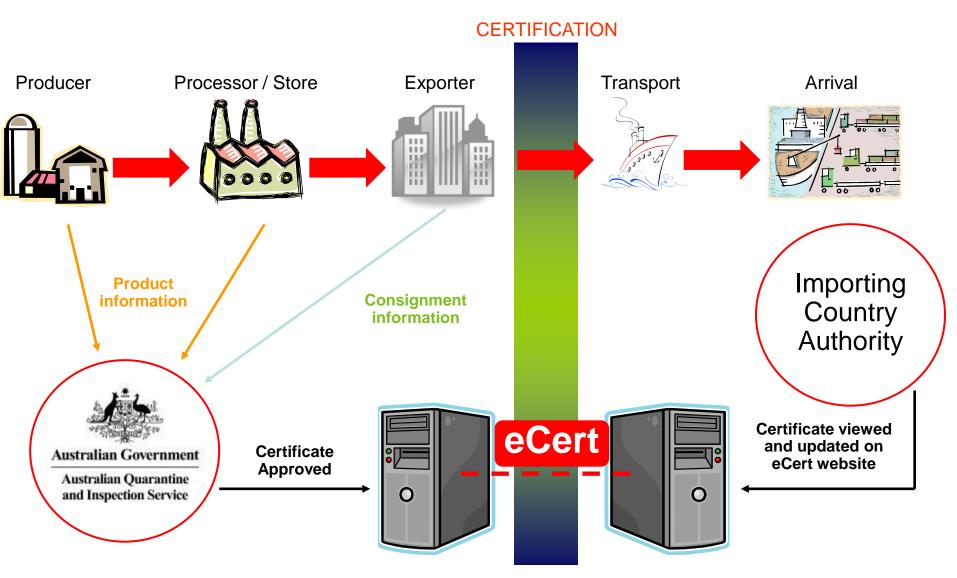


# Electronic Certification Case Study – Australia's eCert

Barbara Cooper June 2011



# **Business Model**



### SYSTEM DESIGN

- eCert Data Specification adapted to AQIS' existing export documentation system (EXDOC)
- AQIS' eCert development covers certification for
  - HORTICULTURE
  - GRAINS
  - MEAT
  - DAIRY
  - FISH
  - WOOL
  - SKINS AND HIDES
  - INEDIBLE MEATS
  - EGGS

# DESIGN PROCESS

- Harmonised requirements with NZFSA
- Developed System
  - XML
  - Web View
  - Exchange Protocols (push/pull)
- Sought recognition of standard at UN/CEFACT
- Trials with Canada, Singapore and USA to test concept
  - Enhanced system

### ELECTRONIC CERTIFICATION

### 3 options to access eCert

SMTP (Secure Mail Transfer Protocol)

The import system would check its Inbox every day.
 Emails are secured using public key encryption (a pair of public and private keys).

Simple Object Access Protocol (SOAP) interface Import officials can do a batch download using this interface. User logon and password is required.

#### eCert website

 Use the Search screen to find certificates and manually download them. User logon and password is required.

### WEBVIEW

- Access to eCert is controlled by logon and password
  - Each government officer who requires access to the system must submit an application form to AQIS.
- Logons can be tailored to the level of access required by each individual officer
  - access to download certificates will be automatically given unless otherwise requested.
- Certificates downloaded from the eCert website are in XML
  - each certificate contains about 10K of data.

### WEBSITE VIEW

#### Web View Access

Participants view the certificate data over the web and assess impact on current systems and clearance activities.

**USA** 

Jordan

Hong Kong

Cyprus

Germany

Norway

Singapore

Spain



### WEBSITE

#### **Secure Website Access**

- Provides manual access to E-cert data
- Benefit to low volume import authorities
- Benefit to de-centralised import clearance
- Export certification can be viewed and verified
- Export Certification can be downloaded
- Requires internet access and logon/password to enter

# Export System to Import System Download

Data is downloaded into the import clearance system.

**WHO** 

China

Japan

Canada

Hong Kong USA

- <?xml version="1.0" encoding="UTF-8" ?>
- -- <certificates>
- -- <certificate no="2040670" status="Approved">
- -- <exporting country country code="AU">
- <country name>Australia</country name>
- <competent\_authority>Department of Agriculture, Fisheries and

#### Forestry</competent\_authority>

- </exporting\_country>
- -- <importing\_country\_code="ID">
- <country\_name>INDONESIA</country\_name>
- </importing\_country>
- -- <title>
- <text language="EN">PHYTOSANITARY CERTIFICATE</text>
- </title>
- -- <exporter id="99999">
- <name>A AQIS 5 TEST EXPORTER</name>
- <address>EDMUND BARTON BUILDING A, BROUGHTON STREET A, BARTON A,

#### CANBERRA ACT 2600, Australia</address>

- </exporter>
- -- <consignee>
- <name>TO ORDER INDONESIA</name>
- <address>., ., INDONESIA</address>
- </consignee>
- <final destination>JAKARTA/SURUBAYA</final destination>
- <inspection\_port country\_code="ID" city\_code="IDJKT">TANJUNG PRIOK/JAKARTA,

#### JAVA</inspection port>

- -\_ <transport means="Sea">
- <vessel>BALTRUM TRADER</vessel>
- <conveyance\_ref>841</conveyance\_ref>
- </transport>

### SOAP INTERFACE

#### **PULL DATA**

- Provides automated access to E-cert data
- Easily adaptable to centralised or decentralised import clearance
- Import authority may collect XML data as needed
- Data collected from secure web service
- Requires logon/password to collect data

### S/MIME INTERFACE

#### **PUSH DATA**

- Provides complete automation for data exchange
- Suited to high volume import authorities
- Suited to centralised import clearance process
- Secured by S/MIME Protocols for digital signature and encryption
- Certification is sent immediately to importing country

# WEB SCREEN SECURITY

### **Security**

- Secure Hypertext Transfer Protocol (HTTPS)
- 128 bit encryption between Web browser and Web server
- Login and Password authentication
- https://www.aqis.gov.au/ecert

# ENHANCEMENTS

- Country/Product Specific Code Sets
   To identify product within systems to assist automated checks
- Version control
   To enable the use of different versions of eCert
- Development of message to comply with UN/CEFACT standard

### SUPPORTING DOCUMENTATION

- UNCEFACT Standard
  - Business Requirements Specification
  - Requirement Specification Mapping
  - XML Schema
  - User Guide
- Design Documentation
  - Interface Guidelines
  - Transfer Protocols
- Technical Training
  - Face to face sessions on system design and process
- Direct Contact



## Thank you

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