



E-cert Transmission Protocols – Electronic Certification Plain English Technical Facts

What is E-cert?

E-cert is an electronic system designed to generate export certificates for traded food and agricultural commodities. Certificates provide assurances to importing countries concerning food safety and animal and plant health.

What does E-cert do?

The system generates an electronic certificate in place of the current paper certificate issued for the clearance of product.

What do I need to receive E-cert?

A computer with access to the internet and permission to access the system.

A country's level of comfort and readiness to adopt electronic certification will vary depending on their existing IT infrastructure. With this in mind, AQIS have developed various ways for trading partners to participate in the many benefits to be derived from electronic certification.

Data Standard

A design document is available to interested parties. AQIS development is based on the E-cert Data Standard Version 2.6 which is currently at UNCEFACT for ratification of an international standard. The data elements and message structure are essential for those countries seeking to develop similar systems to receive or send data. This ensures that both systems are conforming to the same design standards for the exchange of data.

Data Technical Language

The IT language utilised by E-cert is the Extensible Markup Language, or XML as it is commonly known. XML is a plain English text language most suitable for web based applications.

Data Transfer Method

AQIS data transfer uses synchronous transfer methods and provides access to the data through an interface using the Simple Object Access Protocol (SOAP) standard.

Secure Transfer

The transfer of data is supported by Secure Hypertext Transfer Protocol (HTTPS).

Data Security

A 128-bit secure certificate is used for encryption.

Data Access

The receiving authority may either:

- view the data from the web application and download in XML format from this site
- pull the data from the AQIS application via interaction with the SOAP interface
- have the data pushed to their dedicated application using Simple Mail Transfer Protocol (SMTP) and digital certificate authentication.

System Integration

Web Site – clearance may be as simple as verifying detail on the web screen or downloading the XML data into your own database.

SOAP Interface – the certificate data is posted to the SOAP interface within 30 seconds of being generated by our system. A trading partner may then choose to ‘pull’ the data at regular intervals as required in response to their import clearance system/activities. The importing country is responsible for developing an application to interact with our SOAP interface for the purpose of retrieving export certificates. AQIS will provide the E-cert SOAP Interface Design document to aid development.

SMTP Interface – the data will be ‘pushed’ to your system using SMTP to transfer the data and digital certificates to encrypt the data and authenticate the receiving and sending system. The message transferred by SMTP conforms to the S/MIME version 2 Message Specification specification. The certificate data will be sent to your system within 30 seconds after our system has generated an electronic certificate. Your system will be required to acknowledge receipt of the message within an agreed time interval.

Authentication

Trading Partners are required to agree to a terms of reference prior to access being granted.

Access to the web site or to ‘pull’ the data is controlled by log on and password. Users will be restricted by country and commodity with write/read access dependent on their role.

Digital certificates, issued by a recognised Certification Authority, are used to authenticate the receiver/sender for data ‘pushed’ to a system.

Contingency Planning

Both trading partners need to agree on contingency arrangements for major unscheduled outages to ensure trade is not disrupted. AQIS will issue paper certificates where outages are unable to be rectified within shipping time.

Maintenance Periods

AQIS system outages for general maintenance are scheduled during Australia’s low business activity times to minimise disruption to trade.

Scheduled outages are TUESDAY EVENINGS AEST 19.00hrs – 00.00hrs
 SUNDAYS MORNINGS AEST 08.00hrs – 12.00hrs.