

WOAH ELECTRONIC-CERTIFICATION DATA MODEL GUIDANCE

Overview

1. Section 5 of the WOA *Aquatic Animal Health Code (Aquatic Code)* and the *Terrestrial Animal Health Code (Terrestrial Code)* include model health certificates and model veterinary certificates, respectively (hereafter referred to as model veterinary certificates), for international trade for a range of aquatic and terrestrial commodities.
2. WOA has developed electronic-certification data models (see [Annex 1](#)) to assist Competent Authorities in the implementation of paperless veterinary certificates.
3. The WOA e-certification data models were developed in accordance with the model veterinary certificates described in relevant chapters of Sections 5 of the *Aquatic Code* and *Terrestrial Code*.
4. The WOA e-certification data models provide technical information for the use of electronic certificates in the paperless exchange of veterinary certificates for international trade in accordance with the relevant WOA model veterinary certificate.
5. The UN/CEFACT Electronic SPS Certificate Standard ('e-CERT')¹ describes the structure of an electronic SPS certificate and has been published by UN/CEFACT as a global international standard under the name 'e-CERT'. It is the basis for the facilitation of paperless certification between Competent Authorities where export/import certification is required for the importation of a commodity.
6. WOA has used a subset of the UN/CEFACT e-Cert as the basis for the WOA e-certification data models which will be used by Competent Authorities when developing the paperless exchange of veterinary certificates for animal commodities. The e-Cert also ensures consistency among international organisations such as Codex, World Customs Organization and others.
7. The WOA e-certification data models also provide optional data elements of the WOA model veterinary certificates without prescribing a particular approach.

Transformation of model paper-based certificates into electronic certificates for paperless exchange between Competent Authorities

8. Before a Competent Authority can implement the paperless exchange of veterinary certificates, relevant legislation and associated administrative processes must be in place to facilitate paperless exchanges.
9. The *Terrestrial Code* provides model veterinary certificates for international trade in:
 - i. live animals and hatching eggs
 - ii. oocytes, embryos or semen
 - iii. products of animal origin
 - iv. bees and brood combs
 - v. laboratory animals

¹ <https://unece.org/trade/uncefact/ecert>

10. The *Aquatic Code* provides model health certificates for international trade in:
 - i. live aquatic animals and gametes
 - ii. aquatic animal products
11. The 'WOAH e-certification data models (see [Annex 1](#))' include detailed data models for each of the seven WOAHA model veterinary certificates using UN/CEFACT methodology, providing placement and representation of the data elements in XML files.
12. The 'WOAH visual reference e-certification model (see [Annex 2](#))' includes all of the UN/CEFACT e-CERT data elements used in the WOAHA model veterinary certificates. The required data elements of the WOAHA model veterinary certificates are organised to indicate how they relate to one another and to the particular and discrete units of the certificates, in accordance with the UN/CEFACT e-CERT Standard.
13. The Competent Authority may include additional, different, or fewer data elements, using the UN/CEFACT e-CERT standardised language, structure and exchange protocols, when it is bilaterally agreed between the Competent Authorities of the importing and exporting country.
14. In collaboration with information technology experts, public and private sector stakeholders, the Competent Authorities should review the existing processes at the national level for providing or receiving official certificates. This review should include identification of the data elements involved. For the certification data exchange to be effective, both the importing and exporting country should evaluate digitalisation of their national procedures and protocols, including how the data elements of their certificates are processed, and how data elements are organised and relate to one another according to WOAHA e-certification data models presented in [Annex 1](#).
15. Digitalisation at the national level should ensure that the systems, data elements and protocols that are selected to be involved in the paperless exchange follow relevant international standards, recommendations and guidance, where appropriate, for:
 - a. The end-to-end communication;
 - b. The message language, structure and exchange protocols according to UN/CEFACT e-CERT and message structure; and
 - c. A mathematical scheme for verifying the authenticity of digital messages or documents to validate that the message was created by a known sender (authentication) and that the message was not altered in transit (integrity).
16. At the bilateral/multinational level Competent Authorities should coordinate to identify the following for the export and import:
 - a. The essential data elements needed for issuance and receipt of electronic veterinary certificates for international trade between the two countries;
 - b. The connection protocol responsible for the end-to-end communication; and
 - c. Paperless exchange protocols, considering each country's information technology or data management and security requirements, to ensure mutual confidence in a secure and authenticated transmission of electronic certificates.

17. The mechanisms above do not exclude exchanges of electronic representations of certificates (e.g. secured PDF format), nor future evolved electronic certification mechanisms which Competent Authorities bilaterally consider suitable to meet their requirements.

Additional considerations for implementation

18. Competent Authorities of the importing and exporting countries should consider further benefits from digitising the certificate by linking the certification procedures with other databases and systems that may be available.
19. Exchanges of veterinary certificates for international trade via national single windows can help facilitate coordination with other border agencies involved in the clearance of the certified consignment. Single window² is a facility providing trade facilitation that allows parties involved in trade and transport to lodge standardised information and documents with a single entry point to fulfil all import, export, and transit-related regulatory requirements. Individual data elements should only be submitted once electronically. Additional guidance on implementation of a single window can be found using the following resources:
- a. For national purposes, certificate data can be lodged within a single window system as explained in UN/CEFACT Recommendation 33³ and WCO Single Window Compendium.
 - b. For international purposes, countries should coordinate single window interoperability as explained in UN/CEFACT Recommendation 36⁴ and WCO Single Window Compendium.
 - c. For countries considering the use of single windows, details regarding the use of the World Customs Organisation Data Model is available in the Licenses, Permits, Certificates and Other kinds (LPCO) Base Information Package (BIP)⁵.

² <https://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/tools/single-window-guidelines.aspx>

³ [ECE TRADE C CEFACT 2020_07E_Rec33rev-SingleWindow.pdf](#)

⁴ [Recommendation 36: Single Window Interoperability | UNECE](#)

⁵ <https://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/tools/data-model/ehandbook.aspx>