INTRODUCTION

1. At its 23rd session 2017 CCFICS agreed to submit a proposal to commence work on the revision of the Guidelines for Design, Production, Issuance and Use of Generic Official Certificates (CXG 38-2001). According to the proposal, the existing CXG 38/2001 would be revised to develop guidance on the use of electronic certificates by competent authorities and the migration to paperless certification.

2. The Committee was supportive of the discussion paper and recognised the need for better guidance material to assist the understanding of competent authority(ies) on how to implement a paperless exchange of export certificates (CX/FICS 17/23/7).

3. The Committee considered a draft project document (CX/FICS 17/23/7) and recommended that the Committee undertake the development of guidance material for implementation of paperless electronic certification by amending and completing the Codex Guidelines for Design, Production, Issuance and Use of Generic Official Certificates (CXG 38-2001).

4. The new work was approved by CAC40 in July 2017.

5. At its 24th session the Committee agreed to return the proposed draft guidance on paperless use of electronic certificates (revision of the Guidelines for Design, Production, Issuance and Use of Generic Official Certificates (CXG 38-2001)) to step 2 for redrafting taking into account comments received in writing and the discussion at CCFICS24.

6. The Committee also agreed to convene a PWG meeting immediately prior to CCFICS25 to consider the report of the EWG and any comments thereto and prepare recommendations for the plenary session.

TERMS OF REFERENCE

7. The terms of reference for the EWG as agreed by the Committee are:

   a. While the text was generally acceptable, it should be revised in line with established Codex style to ensure consistency and clarity, and remove repetition. The general guidance should highlight general principles and be written in plain language readily understood by users, avoiding excessive technical detail. (Guidelines section 3, 4, 8, 9 and annex II)

   b. Provisions to clarify the following aspects: the paper-to-paperless transition; validation of certificate authenticity; data protection, retention and confidentiality; the handling of electronic

---

1 Argentina, Australia, Belgium, Brazil, Colombia, Canada, Costa Rica, Ecuador, Egypt, El Salvador, EU, France, Germany, Hungary, India, Indonesia, Iran, Ireland, Jamaica, Japan, Kazakhstan, Malaysia, Mexico, Netherlands, New Zealand, Nigeria, Norway, Paraguay, Peru, Republic of Korea, Senegal, Singapore, Spain, Switzerland, Thailand, UK, USA, Uruguay, FAO, The Food Industry Asia (FIA), IDF, World Customs Organization, OIE, IPPC, UN-CEFACT, IICA, ICGMA.
certificates in situations such as export/import rejection and/or redirection/re-consignment of goods in transit; and the handling of invalid certificates, etc. (Guidelines section 9 and annex II sections 3 and 4)

c. References to relevant WCO work and tools should be added to Annex II.

d. In the light of the intersection between competent authorities and the Single Window System, the necessity to address the elements of the different systems used by countries and contain additional detail depending on system so as to provide flexibility to countries (annex II section 3 and 8).


f. The work should focus on developing guidelines for e-certificates and resolving issues that would facilitate the paperless use of e-certificates (Guidelines section 3, 4, 8, 9 and annex II).

PARTICIPATION AND METHODOLOGY

8. Participation in the EWG, which started in April 2019, consisted of 39 Members and 9 Observers.

9. The participants to the working group could comment during two rounds of comments (in May/June and in December) on documents that were drafted by the chairs. In both rounds about 20 per cent of the participants uploaded comments to the EWG platform.

SUMMARY OF DISCUSSION

10. The EWG worked on revising the general guidance for paperless exchange in line with established Codex style avoiding excessive technical details by:

a. adding definitions for paperless exchange and single window

b. extending Principle E for paperless exchange

c. addition of two paragraphs on paperless issuance and receipt of official certificates (section 8)

d. replacing sub-chapter ‘use of electronic certificates’ with ‘paperless exchange of official certificates’.

11. The EWG further worked on clarifying in annex II the paper-to-paperless transition as well as validation of certificate-authenticity, -reliability and -integrity.

12. The comments that were provided during revision rounds resulted in substantial improvements of the draft document compared to the CCFICS24 document. Despite this progress in line with the terms of reference the EWG did not fully reach the point of common understanding about the level of policy related guidance required in the general guidance and about the implementation and technical related guidance in the additional annex. Also the required level of detail of the technical aspects belonging to paperless exchange of certificates, the implementation of a non-repudiation mechanism and the role of Single Window Systems appeared to be a continuous point of discussion for the participants who offered written comments.

CONCLUSIONS

13. After the second-round comments the chairs are able to conclude that substantial progress in line with the terms of reference has been made since CCFICS24. Despite the support of those participants that judged the draft guidance as satisfactory, the comments of other participants remained critical on the approach of paper-to-paperless transition and on the use of the terminology such as “non-repudiation”. The sensitivity of this specific terminology might be related to the misapprehension that non-repudiation would be equivalent to a qualified digital signature. This qualified digital signature is indeed a quite common way to achieve validation of the issuance of a certificate preventing any alteration by a non-approved party after issuing, but is certainly not the only way to achieve non-repudiation.

14. Only after the second-round comments the chair received conceptual advice from some international experts on data modelling the generic model official certificate using international standards. Taking into consideration the comments provided on the introduction of a data model the chair considered this advice essential enough to recommend this conceptual advice for consideration by the PWG and plenary.
RECOMMENDATIONS

15. Given the differences of opinion on certain aspects of the draft guidance, and in particular the required level of technical details in annex II for some Members, the chairs of the PWG are advised to first reach agreement on the changes in the general guidance followed by the level of detail of the technical aspects belonging to paperless exchange of certificates including a non-repudiation mechanism.

16. CCFICS should take into consideration that the general guidance is describing the international paperless exchange (use) of official certificates without interfering in the existing use of the paper certificate and its content and avoiding introduction of concepts that may hamper the use of emerging technologies for full paperless exchange of the general model official certificate.

17. The annex II provides for exporting and for importing countries considerations for the more technical aspects related to paperless exchange. This would mean the transition to and implementation (production) of paperless exchange of certificates between Members including the authenticity, integrity and validity of the international electronic exchanges (design). Specific technical components or concepts that would assist developing country Members during their transition to paperless are incorporated in annex II taking into consideration that the use of such additional technical guidance will strongly depend on the level of development and needs of the Member countries and/or exchanging competent authorities.

18. Concerning annex II - Paperless exchange of official certificates, the chairs would also like to request CCFICS to take note of the following conceptual advice given to the chair only in the last weeks before finishing this report. The essence of this advice was to develop a Codex-owned reference model of the generic model official certificate and to introduce this reference model in annex II. Availability of such a Codex owned reference model will not only enable international organisations like UN/CEFACT and WCO to further map the Codex generic model official certificate into their own international standards (supported by a governmental procedure) but will also put Codex and the other international organisations in a position to anticipate future developments with regards to the data modelling of the generic model official certificate and in this way maintaining the established alignment between these organisations.

19. The Committee is therefore invited to consider the draft the revision of the Guidelines for Design, Production, Issuance and Use of Generic Official Certificates (CXG 38-2001) in Appendix I.
SECTION 1 – PREAMBLE

1. These guidelines recognize that the importing country’s competent authority may, as a condition for clearance of food presented for international trade, require official certificates issued by or with the authority of the exporting country's competent authority.

2. These guidelines are not intended to encourage or mandate the use of official certificates for food presented for international trade or to diminish the trade facilitating role of commercial or other types of certificates, including third party certificates that are not issued by, or with the authority of, the government of the exporting country.

3. These guidelines recognize that while official certificates may help importing countries to achieve their objectives relating to food safety and ensuring fair practices in the food trade there may also be other approaches, which can complement or substitute for official certificates, e.g., establishment listing.

SECTION 2 – SCOPE AND OBJECTIVES

4. These guidelines provide guidance to countries on the design, production, issuance and use of official certificates to attest that food presented for international trade has met the importing country requirements relating to food safety, and/or ensuring fair practices in the food trade.

5. These guidelines provide assistance in identifying the information and attestations that can be provided by competent authorities.

6. These guidelines are equally applicable to official certificates regardless of the mode of transmission, e.g. paper or electronic.

7. These guidelines do not deal with matters of animal and plant health unless directly related to food safety. However, it is recognized that, in practice, a single official certificate may contain information relevant to several matters (e.g., food safety and animal and plant health).

SECTION 3 – DEFINITIONS

Certificates are those paper or electronic documents, which describe and attest to attributes of consignments of food destined for international trade.

Certification is the procedure by which official certification bodies or officially recognized certification bodies provide written or equivalent assurance that food or food control systems conform to requirements. Certification of food may be, as appropriate, based on a range of inspection activities which may include continuous on-line inspection, auditing of quality assurance systems, and examination of finished products.

Official certificates are certificates issued by, or under the control of the exporting country’s competent authority, including by a certifying body recognized by the competent authority to issue such certificates.

Certifying bodies are official certification bodies and officially recognized certification bodies.

Certifying officers are officers authorized or recognized, by the exporting country’s competent authority, to complete and issue official certificates.

Consignment means a defined collection of food products normally covered by a single certificate.

---

2 These Guidelines should be read in conjunction with the Codex Guidelines for the Design, Operation, Assessment, and Accreditation of Food Import and Export Inspection and Certification Systems (CXG 26-1997), particularly Section 7, certification systems. Reference should also be made to Codex-developed model certificates.

3 Principles for Food Import and Export Inspection and Certification (CXG 20-1995).

4 Recognition of certification bodies is addressed under Section 8 – Official Accreditation of the Guidelines for the Design, Operation, Assessment and Accreditation of Food Import and Export Inspection and Certification Systems (CXG 26-1997).
**Paperless exchange of official certificates** is the act of competent authorities or certifying bodies providing and receiving the certificate information and attestations together with the certificate data set in electronic form and includes the storage of such certificates.

**Single Window** is a facility that enables public and private stakeholders involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit related regulatory requirements.

**SECTION 4 – PRINCIPLES**

8. The following principles apply to the design, production, issuance and use of official certificates.

A. Official certificates should be required only where attestations and essential information are necessary to ensure that food safety and/or fair practices in the food trade requirements are met.

B. Exporting countries may provide assurances through means other than consignment- by-consignment certificates, as appropriate.

C. Attestations and information required by the importing country should be confined to essential information that is related to the objectives of the importing country’s food inspection and certification system.

D. The rationale and requirements for specific attestations and identifying information should be communicated to exporting countries in a consistent and transparent manner and be applied by the importing country in a non-discriminatory manner.

E. Official certificates regardless of their mode of transmission and their contents, should present information in a form that simplifies and expedites the clearance process while meeting the importing country requirements. **E(bis). Importing and exporting countries should consider using single window facilities, where they exist, for the paperless exchange of official certificates.**

F. The competent authority of the exporting country is ultimately responsible for any certificate it issues or authorizes to be issued.

G. All relevant attestations and identifying information required by the importing country should be included on a single official certificate, where possible, to avoid multiple or redundant certificates.

H. Competent authorities should take appropriate action to prevent the use of fraudulent certificates and should assist, as appropriate, in the timely investigation of such use.

**SECTION 5 – USE OF OFFICIAL CERTIFICATES**

**Principle A**

Official certificates should be required only where attestations and essential information are necessary to ensure that food safety and/or fair practices in the food trade requirements are met.

9. Specific attestations and information related to the product identified in the certificate can provide assurances that the food or group of food products:

– complies with the relevant laws and regulations of the exporting country

– complies with the food safety requirements of the importing country; and

– complies with requirements of the importing country related to fair practices in the food trade.

10. The importing country should consider the need to provide flexibility to allow such assurances to be provided by alternative means so long as food safety and fair practices in food trade are assured.

**SECTION 6 – ALTERNATIVES TO THE USE OF OFFICIAL CERTIFICATES**

**Principle B**

Exporting countries may provide assurances through means other than consignment- by-consignment certificates, as appropriate.

11. Alternative arrangements that provide equivalent assurances with respect to food safety or ensuring fair practices in the food trade should be considered.

---

12. In some circumstances, an importing country may agree to accept from an exporting country a listing of establishments that meet the specific requirements of the importing country. This listing may be used to accomplish the same objectives as consignment-by-consignment certificates, recognizing that the importing country may still need additional information (e.g., mode of transport) for each consignment.

13. The mechanisms and criteria for establishing, maintaining and reviewing such lists should be made transparent by the exporting country and agreed to by the importing country.

14. Recognising that a consignment is normally covered by a single official certificate, it is also possible for certain certificates to apply to multiple consignments if agreed by the importing country. In such cases multiple consignment certificates should have a fixed duration.

SECTION 7 – EXTENT OF INFORMATION, TRANSPARENCY AND NON-DISCRIMINATION

Principle C
Attestations and information required by the importing country should be confined to essential information that is related to the objectives of the importing country's food inspection and certification system.

15. The particular official attestations and information to be included on a certificate will be determined by the requirements of the importing country. Importing countries should make use of international standards, if available, with the objective of reducing the need for extensive detail in certificates.

16. Official attestations and information should be clearly identified in the text of the certificate and not be any more complex or detailed or onerous for the exporting country than is necessary to meet the objectives of the importing country's food inspection and certification system. Such attestations may include, but are not limited to:

– compliance with particular standards, production or processing requirements, if relevant;
– the status (e.g., licensing details) of production, processing, packaging and/or storage establishments in the exporting country;
– the exporting country's animal health status, if it may affect the safety of the food; and
– reference to any associated bilateral/multilateral agreement.

17. Commercial or marketing specifications, such as specific product attributes or conformance to importer specifications should not be required in official certificates.

18. A consignment consisting of a food sample intended for evaluation, testing or research in the importing country should be clearly identified according to its intended use. It should be clearly indicated on the certificate or the package that the sample is not intended for retail sale and has no commercial value.

Principle D
The rationale and requirements for specific attestations and identifying information should be communicated to exporting countries in a consistent and transparent manner and be applied by the importing country in a non-discriminatory manner.

19. In establishing requirements for certificates, importing countries should ensure that criteria will apply equitably to all exporting countries in order to avoid arbitrary or unjustifiable discrimination.

20. Competent authorities of the importing country should, on request, communicate to the exporting country the requirements for the official attestations and information in certificates and their rationale.

SECTION 8 – DESIGN OF OFFICIAL CERTIFICATES

Principle E
E. Official certificates regardless of their mode of transmission and their contents, should present certificate data elements in a form that simplifies and expedites the clearance process while meeting the importing country requirements.

21. The design and utilization of official certificates should:

– simplify and expedite the clearance of the consignment at the point of entry or the point of control;
– provide for accurate identification of the consignment being certified and the parties involved in the production and issuance of the certificate;
– facilitate the importing country's assessment of the validity of the certificate; and
– minimize the potential for fraud.
22. To the extent practicable, a standard format should be employed for official certificates. Certificates should:

– clearly identify the certifying body and any other relevant parties involved in the production and issuance of the certificate;  
– be designed so as to minimize the potential for fraud including use of a unique identification number, or other appropriate means to ensure security (for example, use of watermark paper or other security measures for paper certificates use of secure lines and systems for electronic certificates);  
– clearly describe the commodity and consignment to which the certificate relates;  
– contain a clear reference to those official requirements for which the certificate was issued;  
– contain attestations by the official or officially recognized certifying body which relates to the consignment described on that certificate and should not be required to be endorsed/re-certified after they are issued; and  
– be in a language or languages fully understood by the certifying officer in the exporting country, in transit countries where appropriate, by the receiving authority in the importing country or those countries in which the inspection of the food takes place. Where required the certificates can be accompanied by official translations.

23. The information related to the product being certified should be clearly documented on the certificate and should include as a minimum the following. It may also include additional information as agreed to by the importing and exporting country:

– nature of the food;  
– name of product;  
– quantity, in the appropriate units;  
– a description of the commodity and consignment to which the certificate uniquely relates, e.g., lot identifier, means of transport, security seal number(s) or date coding;  
– identity and, as appropriate, the name and address of the producer/manufacturer of the food and/or storage establishments and their approval number;  
– name and contact details of the exporter or consignor;  
– name and contact details of the importer or consignee;  
– country of dispatch, or part of the country where these relate to specific attestations; and  
– country of destination.

**Principle E(bis)**

*E*(bis). Importing and exporting countries should consider using single window facilities, where they exist, for the paperless exchange of official certificates.

24. The certificate information and attestations (together certificate data set) should enable lodgment through a Single Window system:

 SECTION 9 – ISSUANCE AND RECEIPT OF OFFICIAL CERTIFICATES (RESPONSIBILITY OF CERTIFYING OFFICERS, SECURITY AND PREVENTION OF FRAUD)

**Principle F**

The competent authority of the exporting country is ultimately responsible for any certificate it issues or authorizes to be issued.

25. Official certificates as issued, are ultimately the responsibility of government authorities, while recognizing that it is the food production sector that is fundamentally responsible for food safety and the prevention of fraud and deception as it relates to food in international trade.

---

6 When additional information is required on the certificate, it should be constructed in such a way that it is clear who has provided the various parts of the certificate (e.g. laboratory, producing establishment, certifying body).

7 The World Custom Organization classification should be used when appropriate. When species identification is needed, the Linnaeus classification should be used.

8 Reference should be made to Codex standards if available.

9 Quantity should be in accordance with the International System of Units (Modern Metric System).

10 ISO country codes may be used.

11 ISO country codes may be used.
26. The certifying body should:

– be designated and adequately empowered by national/regional\(^{12}\) mandate in a transparent manner to provide the particular attestations required in an official certificate;

– have its designation/empowerment recognized as sufficient by governments, alleviating the need for any additional endorsement/re-certification of the certificates they issue;

– provide information relating to its official empowerment to the importing country upon request;

– ensure that its procedures allow for the issue of official certificates in a timely manner so as to avoid unnecessary disruptions to trade;

– have in place an effective system to minimize, to the extent practicable, the fraudulent use of official certificates; and

– have in place an effective and timely training program for its certifying officers.

27. If the competent authority of the exporting country has legislative authority to utilize third party certification bodies and has authorized a third party body to issue certificates on its behalf, the competent authority must ensure that there is adequate oversight of the third party, including auditing arrangements.

28. Certificates should normally be issued prior to the consignment to which the certificate relates leaving the control of the certifying body. Certificates may be issued while consignments are in transit to or have arrived at the country of destination only when appropriate systems of control are in place in the exporting country to support this practice and the practice is agreed to by the importing country, and when applicable, to the transiting country.

29. Certifying officers should:

– be appropriately designated by the certifying body;

– have no conflict of interest in the commercial aspects of the consignment and be independent from the commercial parties;

– be fully conversant with the requirements to which they are attesting;

– have access to a copy of regulations or requirements that are referred to on the certificate or clear information and guidance notes issued by the certifying body or competent authority explaining the criteria that the product must meet before being certified;

– only attest to matters that are within their own knowledge (or have been separately attested to by another competent party); and

– only certify to the circumstances that can be verified, directly or by documentation provided, including conformity with production requirements and any other specified requirements between production and date of issue of the certificate.

30. Where paperless exchange of certificates is under consideration the exporting and importing countries should have:

– appropriate controls in place to facilitate the trustworthy paperless exchange of official certificates;

– infrastructure for competent authorities to provide and/or receive certificate information and attestations in electronic form.

– capability to generate, maintain, make available and validate the official certificate that is exchanged.

– capability to exchange messages between officials involved in certification.

– adequate data retention and archiving in place.

31. Where paperless exchange of certificates is in place:

– the competent authority of the importing country becomes the custodian of the issued certificate after acknowledging that it is received.

– the competent authority of the exporting country maintains the status of the exchanged certificate and shares the actual status with the exporting applicant of the involved certificate.

\(^{12}\) Regional refers to Regional Economic Integration Organisation (REIO) as defined by Article 2, Constitution of the Food and Agriculture Organization of the United Nations.
**Principle G**

All relevant attestations and identifying information required by the importing country should be included on a single official certificate, where possible, to avoid multiple or redundant certificates.

32. Requests for certificates should minimize to the extent possible the need for redundant or duplicative certificates. Examples of such situations include: (1) multiple certificates with similar attestations are required by different agencies within an importing country; (2) multiple certificates are required for different attributes when a single attestation would suffice; and, (3) multiple certificates with similar attestations are required from different certifiers within the exporting country.

33. When a certificate requires multiple attestations (e.g., food safety, animal health and/or plant health) standard attestations developed by organizations recognized in the World Trade Organization (WTO) Sanitary and Phytosanitary Agreement (SPS) may be used (i.e., Codex, OIE, IPPC).

34. In case certificates are required from different bodies, a single competent authority may issue the certificate based on information received from other official bodies. An example of such cases would be attestations of animal health status and public health matters on the same certificate.

35. In instances where the importing country requests that an official certificate contain proprietary information, such requests should be confined to the need to ensure the product meets food safety requirements and to ensure fair practices in the food trade. If such information is requested, adequate means to protect the proprietary nature of such information shall be employed and communicated to the exporter.

36. Commercially sensitive information such as contract numbers and bank arrangements should not be included in official certificates.

37. Where, in exceptional cases justified by documented public health problem, the importing country requires assurance that an ingredient originating from a specified country (or countries) is not contained in the exported food; such attestations should be included in the certificate. When the country or countries have managed the risk based on science and the measures implemented to address the hazard are satisfactory to the importing country, the use of these attestations should be discontinued.

**Use of paper certificates**

38. Paper certificates where used should be issued and presented to the exporter or their agent as the original certificate.

39. Paper certificates should, to the extent practicable, be in compliance with the UN Layout Key for Trade Documentation (Recommendation No 1, ECE/TRADE/137).

40. A copy of the original certificate (clearly marked as such) should be kept by the certifying body in the exporting country and be provided, on request, to the competent authority in the importing country, or in a country carrying out import controls on behalf of the importing country.

41. When issuing a paper certificate, the certifying officer should ensure that:
   – the certificate contains no deletions other than those required by the text of the certificate;
   – any alterations of the certified information are initialized or otherwise approved by the certifying body;
   – for multiple page certificates, it is clear that the pages constitute a single certificate including official translation(s) when appropriate (e.g., each page is numbered with the same unique certificate number so as to indicate it is a particular page in a finite sequence);
   – the certificate bears the official identifier of the competent authority, signature, name and official position of the certifying officer (the signature may be hand written or a controlled facsimile signature);
   – the certificate bears the date, expressed unambiguously, on which the certificate was signed and issued and, where appropriate, the period of time for which the certificate will remain valid; and
   – no portion of the certificate is left blank in a manner that would allow it to be amended.

**Paperless exchange of official certificates (annex II)**

42. Competent authorities that use paperless exchange of official certificates should have infrastructure that adequately supports such exchanges.

43. The electronic systems that are used for paperless exchange of official certificates should:
be based on or be able to interoperate with internationally recognized data and message standards such as those published by UN/CEFACT for electronic SPS certificates exchanged between government border authorities (UN/CEFACT eCert SPS data standard and message structure). The importing and exporting countries will need to agree on the certificate data elements and messages to be exchanged;

- facilitate use of available technologies for message exchange to expedite direct communication between officials;

- ensure the technology that generates, maintains, makes available and validates the issuance of this certificate and prevents any alteration by a non-approved party after issuing.

ensure message authentication;

44. A decision to implement paperless exchange of official certificates should take into account the availability of the required infrastructure and capabilities of involved countries and include a contingency plan to ensure disruption to trade is minimal in the event of system failure.

45. The exporter or their agent should be notified when an electronic certificate has been authorized for a consignment and where appropriate be informed about the status of a certificate that is exchanged paperless.

Presentation of original certificates

46. In the case of paper certificates the importer or consignee is responsible for ensuring that the product and the original certificate, in accordance with the importing country's requirements, is presented to the importing country's authorities or to the authorities in a country carrying out import controls on behalf of the importing country.

47. When countries exchange official certificates paperless, the importing country's competent authorities should ensure that the importer/consignee or their representative provides necessary or appropriate details to the importing country's authority or the authority carrying out import controls on behalf of the importing country to allow the consignment identity to be verified.

Replacement of certificates

48. Replacement certificates may be issued by a competent authority to rectify certificates that have been for example, lost, damaged, contain errors, or where the original information is no longer correct. These certificates must clearly indicate that they are replacing the original certificate. A replacement certificate should reference the number of the original certificate that it supersedes and the date the original was signed. The original certificate should be cancelled and in case of hard copy, where possible, returned to the issuing authority.

Revocation of certificates

49. When, for good and sufficient reason including errors, there is cause to revoke a certificate, the exporting competent authority should revoke the original certificate as soon as possible and notify the exporter or their agent in hard copy or by electronic means of the revocation. The notice should reference the number of the original certificate to which the revocation refers and provide all particulars regarding the consignment and the reason(s) for the revocation. Confirmation that the revoked original paper certificate has been destroyed or marked as revoked should be confirmed to the issuing authority.

Principle H

Competent authorities should take appropriate action to prevent the use of fraudulent certificates and should assist, as appropriate, in the timely investigation of such use.

Fraudulent certificates

50. When a competent authority suspects on reasonable grounds that an official certificate may be fraudulent, because of deliberate misrepresentation or other criminal activity, it should immediately commence an investigation and involve the certifying body of the country from which the suspected fraudulent certificate is purported to have originated. Considerations should also be given to notify any third country that may have

---

13 The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) is a subsidiary, intergovernmental body of the United Nations Economic Commission for Europe (UNECE) Committee on Trade, mandated to develop a programme of work of global relevance to achieve improved worldwide coordination and cooperation in these areas of trade facilitation recommendations and electronic business standards (https://www.unece.org/cefact/)
been implicated. Additionally, the competent authority should retain the associated consignment under its control, pending the outcome of the investigation.

51. Certifying bodies in the countries from which the suspected fraudulent certificate is purported to have originated should cooperate fully with the investigation of the competent authority of the importing country. If the certificate is found to be fraudulent, every effort should be made by the competent authorities to identify those responsible so that appropriate action can be taken according to national/regional law.

52. The product relating to fraudulent certificates should be considered to be in violation of the importing country’s requirements since the precise condition of the product is unknown. Destruction of the product is one of the measures that can be implemented since destruction is a strong deterrent to future fraudulent activity.

53. Competent authorities in importing countries should maintain current records of certificates from certifying bodies in pertinent exporting countries, including, in relation to paper certificates, copies of official stamps and marks.
ANNEX I

GENERIC MODEL OFFICIAL CERTIFICATE

Scope of the Annex

This Annex is intended to provide additional guidance to competent authorities based on the principles set out in Section 4 and elaborating on the information provided in Sections 8 and 9. When model official certificates for specific purposes are otherwise established by Codex Alimentarius, countries should refer to such guidelines.

Although certificates are primarily focused on sanitary aspects, they may also address aspects relating to fair practices in the food trade where these matters are certified by the certifying bodies.

This model certificate could cover multiple products in a single certificate.

Explanatory notes on the generic model for an official certificate

General:

The certificate should be completed in a legible manner.

If the consignee, point of entry, or transport details change after the certificate has been issued, it is the responsibility of the importer to advise the competent authority of the importing country. Such a change should not result in a request for a replacement certificate to be issued.

The model certificate as it appears includes numbers designed to facilitate establishing a link between a particular section and the corresponding explanatory note. It is not intended that these numbers appear in the actual certificates issued by the certifying body.

Specific:

Certificate type: the certificate should be marked with “ORIGINAL”, “COPY” or “REPLACEMENT” as appropriate.

Country: name of the country that issues the certificate possibly accompanied by a logo or a letter head. The objective is to clearly identify the country having the responsibility of issuing the certificate.

GUIDELINES FOR DESIGN, PRODUCTION, ISSUANCE AND USE OF GENERIC OFFICIAL CERTIFICATES (CXG 38-2001)

1. Consignor/Exporter: name and address (street, town and region/province/state, as applicable) of the natural or legal person or entity who sends the consignment.

2. Certificate number: this identification number should be unique for each certificate and authorized by the competent authority of the exporting country. For multiple page certificates, see paragraph 38 of document CXG 38-2001.

3. Competent Authority: name of the Competent Authority of the country responsible for certification.

4. Certifying Body: name of the Certifying Body when it is different from the Competent Authority.

5. Consignee/Importer: name and address of the natural or legal person or entity to whom the consignment is shipped in the country of destination, at the time the certificate is issued.

6. Country of origin\(^\text{14}\): name of the country in which the products were produced, manufactured or packaged.

7. Country of destination\(^\text{15}\): name of the country of destination of the products.

8. Place of loading: name of a seaport, airport, freight terminal, rail station or other place at which goods are loaded onto the means of transport being used for their carriage.

9. Means of transport: air/ship/rail/road/other, as appropriate and the identification (name or number) of these if available, or relevant documentary references.

\(^\text{14}\) ISO Code: the two letter country codes, in compliance with the international standard (ISO 3166 alpha-2), could be used.

\(^\text{15}\) ISO Code: the two letter country codes, in compliance with the international standard (ISO 3166 alpha-2), could be used.
10. Declared point of entry: if required and available the name of the point of entry authorised by the competent authority of the importing country and, its UN/LOCODE (refer to the United Nations Code for Trade and Transport Locations).

11. Conditions for transport/storage: appropriate temperature category (ambient, chilled, frozen) or other requirements (e.g. humidity) for transport/storage of the product.

12. Total quantity: in appropriate units of weight or volume for the whole consignment.

13. Identification of container(s)/Seal number(s): identify the containers and seal numbers where applicable or if known.

14. Total number of packages: total number of packages for all products in the consignment.

15. Identification of food product(s): give the descriptive information specific to the product or products to be certified.

Where appropriate: nature of the food (or description of the commodity), commodity code (HS code), species, intended purpose, producer/manufacturer, approval number of establishments (slaughterhouse, production plant, store (cold store or not)), region or compartment of origin, name of the product, lot identifier, type of packaging, number of packages, net weight per type of product.

– Nature of the food (or description of product): description of the product(s) precise enough to allow the product(s) to be classified in the World Customs Organisation's Harmonised System, including the commodity code (HS code) where appropriate

– Intended purpose (or Food products certified for): the end use of the product should be specified in the certificate (e.g. direct human consumption, further processing, and trade samples).

Where a certificate for trade samples is required, a consignment consisting of a food sample intended for evaluation, testing or research, in the importing country may be described using a term such as "trade samples". It should be clearly indicated on the certificate or the package that the sample is not intended for retail sale and has no commercial value.

– Region or compartment of origin: if applicable: This is only for products affected by regionalisation measures or by the setting up of approved zones or compartments.

– Type of packaging: identify the type of packaging of products as defined in Recommendation No. 21 of UN/CEFACT (United Nation Centre for Trade Facilitation and Electronic Business).

16. Attestations: information indicating compliance with the relevant regulation(s) of the importing or exporting countries in accordance with the recommendations, as appropriate, of the Codex Alimentarius Commission. Attestations should be the minimum required for the products certified to ensure food safety and fair practices in the food trade. Attestations should be applicable to the food products certified.

Non-applicable attestations should be excluded or deleted.

There may be other attestations covering different issues (cf. paragraph 7 of document CXG 38-2001).

17. Certifying officer: name, official position, official stamp (optional), date of signature and signature.

Certificates should be issued in accordance with section 9 of document CXG 38-2001.

**Logo/LETTERHEAD**

**GENERIC MODEL OFFICIAL CERTIFICATE**

**TEMPLATE GENERIC MODEL OFFICIAL CERTIFICATE**

Generic Model Official Certificate should be read in conjunction with the explanatory notes.

* If required
ANNEX II:

PAPERLESS EXCHANGE OF OFFICIAL CERTIFICATES

SECTION 1 – INTRODUCTION

1. Competent authorities may decide to implement paperless exchange of official certificates, when technically and legally feasible.

2. The operations for paperless exchange of official certificates should respect the legal requirements of the exporting and the importing country without creating barriers by introducing excessive technical requirements.

3. The Codex generic model official certificate (Annex 1) is transposed into an independent generic reference model for application in message exchanges in accordance with international standards.

4. Exchanges of certificates via national single windows can help facilitate coordination with other border agencies involved in the clearance of the certified consignment.

SECTION 2 – SCOPE

5. This annex provides guidance for use by competent authorities of both importing and exporting countries to ensure an effective, efficient and consistent approach for paperless exchange of official certificates by applying an electronic certification mechanism based on international standards and recommendations, like UN/CEFACT SPS standardized language, structure and exchange protocols.

6. It should guide competent authorities in implementing paperless exchange of official certificates without mandating the use of specific concepts for electronic certification mechanisms to achieve such exchanges.

SECTION 3 – DEFINITIONS

Electronic certificate is the digital representation (including images where necessary) of the wording and data describing and attesting to attributes of a consignment of food destined for international trade, transmitted by authenticated and secure electronic means from the exporting country’s competent authority to the importing country’s competent authority.

Digital signature is the mathematical scheme for verifying the authenticity of digital messages which is used to implement the electronic signature.

Electronic signature is data in electronic form which is attached to or logically associated with certification data in electronic form and which is used with the intention to be bound by the contents of the signed official certificate.

Non-repudiation service is a technology with the goal to generate, maintain, make available and validate the issuance of the official certificate in order to help resolve potential disputes between the importing and exporting country about the occurrence or non-occurrence of the issuance of that certificate.

SECTION 4 – TRANSITION TO PAPERLESS EXCHANGE OF OFFICIAL CERTIFICATES

7. Competent authorities should have implemented internal capabilities and established internal IT and data security protocols at the national level prior to pursuing bilateral/multinational arrangements for paperless exchange of official certificates and taking the following into consideration.

National internal preparational considerations

8. In collaboration with information technology experts, competent authorities should review together with the public and private stakeholders the existing processes at national level for providing and/or receiving official certificates including identification of the data elements involved. Consideration should also be given to facilitating the exchange of official electronic certificates via a single window.

1. Exporting countries should consider digitizing their export procedures, including inspections and protocols and how the data elements of their export certificates\(^\text{16}\) are processed and how they are organized and relate to one another\(^\text{17}\).

2. Importing countries should consider digitizing their import procedures and protocols and how the data elements of their import certificates\(^\text{18}\) are used in their import protocols.

\(\text{16}\) According to the principles set out in Section 4 and elaborating on the information provided in Sections 8 and 9 of this guidelines

\(\text{17}\) According to section 8 of this Annex

\(\text{18}\) According to the principles set out in Section 4 and elaborating on the information provided in Sections 8 and 9 of this guidelines and section 8 of this annex
9. In this process the systems, data elements and protocols that are selected to be involved in paperless exchange should follow where considered appropriate, relevant international standards, recommendations and guidance for

1. The end-to-end communication
2. The message language, structure and exchange protocols\textsuperscript{19}
3. The non-repudiation service (including digital signature\textsuperscript{20} and certifying officer identity)
4. Lodging them with a Single Window system\textsuperscript{21}.

**Bilateral/multinational considerations**

10. Exporting and importing countries should coordinate to identify:

1. The essential data elements needed for issuance and receipt of electronic official certificates between the two countries;
2. Connection protocol responsible for the end-to-end communication
3. 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.
4. Single Window Interoperability\textsuperscript{22}

11. Paper versions of the certificates should stay in parallel to the electronic exchange until both the importing and exporting country are satisfied that:

1. The connectivity of their respective systems is reliable for the full scope of official certificate clearance activities (e.g. acceptance, rejection, or replacement) and types of acknowledgement agreed;
2. The integrity, authenticity and security of the exchange meets agreed criteria; and
3. Understandings are in place as to how business continuity will be dealt with should anything effect the system to system exchange.

**SECTION 5 – EXAMPLES OF EXCHANGE MECHANISMS**

12. The concepts below are the electronic certification solutions identified to date, each delivering electronic certificates in a specific format together with dedicated security features.

1. The electronic certification system of the importing competent authority retrieves (“pulls”) or receives (the information having been “pushed”) certificates data directly from the electronic certification system of the exporting competent authority through a web service interface (eg Simple Object Access Protocol [SOAP]).
2. The electronic certification system of the exporting competent authority provides certificates, to the competent authority of the importing country through Simple Mail Transfer Protocol (SMTP).
3. The electronic certification system of the importing competent authority receives certificates data from the electronic certification system of the exporting competent authority through a central hub.

13. The examples above do not exclude future evolved electronic certification mechanisms and exchanges of electronic representations of certificates (e.g. secured PDF format) which competent authorities consider suitable to meet their requirements.

**SECTION 6 – ROLES AND RESPONSIBILITIES**

14. Paperless exchange of official certificates between exporting and importing countries using UN/CEFACT SPS standardized language, structure and exchange protocols presents the following responsibilities of involved competent authorities and business operators.

---

\textsuperscript{19} UN/CEFACT SPS standardized language, structure and exchange protocols and WCO Data Model Information Package for License, Permit and Certificate of Origin (CODEX Derived IP)

\textsuperscript{20} A valid digital signature, where the prerequisites are satisfied, gives a recipient very strong reason to believe that the message was created by a known sender (authentication), and that the message was not altered in transit (integrity)

\textsuperscript{21} UN/CEFACT Recommendation 33

\textsuperscript{22} UN/CEFACT Recommendation 36
The exporting competent authority makes available the issued official certificate to the importing competent authority and confirms to the exporting business operator the status the official certificate that is exchanged paperless.

The exporting business operator is responsible for informing the importing business operator of the existence of the approved official certificate and its identity (e.g. certificate number) and other relevant information contained in the electronically exchanged.

The importing competent authority becomes the custodian of the issued official certificate as soon as the certificate is properly received and should confirm\(^\text{23}\) to the exporting competent authority that the official certificate has been received.

The importing competent authority receives electronically from the importing business operator necessary or appropriate details of the certificate to allow the import request to be linked with the official certificate.

SECTION 7 – ADDITIONAL FUNCTIONALITIES TO RETRIEVE CERTIFICATE INFORMATION

15. The exporting competent authority may consider

1. the use of secured technology as a means to provide authorities with lawful accessibility to information about certified shipments (viewer).

2. to provide a service, for example a dedicated website, to enable authorities involved in border clearance or transit to verify certificate information which is issued through its electronic certification system (verification tool).

16. The importing competent authority may authorise the exporting competent authority to use the secured database of the importing country in which the certifying official of the exporting country can insert the certificate information.

SECTION 8 – GENERIC REFERENCE MODEL OF THE GENERIC MODEL OFFICIAL CERTIFICATE

17. The generic reference model is an independent abstract model that organizes the data elements\(^\text{24}\) of the Codex generic model official certificate in annex I and how they relate to one another and to properties of the real world that exists as a particular and discrete unit\(^\text{25}\).

18. The file ‘descriptions for the generic model official certificate’ clarifies the relation between the boxes of the generic model official certificate and the elements of the generic reference model. The generic reference model is represented on the first page in the file called ‘generic reference model’.

19. The second page in the file called ‘generic reference model’ shows the generic reference model completed with practical extinctions that are identified to date and are used in existing exchanges between competent authorities.

20. These extinctions do not have any standardizing or prescriptive character, but are intended to make competent authorities aware of available practical solutions for issues beyond the generic reference model.

The detailed description for the generic model and the generic reference model can be accessed through the following links:

\[\text{descriptions for the generic model official certificate.xlsx} \quad \text{Generic Reference Model.pdf}\]

\(^{23}\) In case of UN/CEFACT SPS standardized exchange protocols the receiving infrastructure will automatically generate this

\(^{24}\) Data elements of the certificate are units of data which have precise meaning

\(^{25}\) Data mapping is the process to integrate a wide variety of data
SECTION 9 – EXAMPLES OF DATA MODELING THE GENERIC MODEL OFFICIAL CERTIFICATE

21. The generic reference model (from section 8) can be used for further mapping into a XML 26 data model and XML schema (XSD 27) of the data elements.

1. The data model below, called UN/CEFACT compliant eFood certificate, is the result of the mapping using UN/CEFACT SPS standardized language, structure and exchange protocols and an example of an electronic certificate for food.

[Link for the data model for UN/CEFACT compliant eFood certificate]

2. Another example of an electronic certificate for food that is aligned with the reference data model of paragraph 17 is the CODEX Derived Information Package (DIP) in the World Customs Organisation Data Model 28 (WCO DM). The Codex DIP is a specific Derived Information Package and a subset of the WCO DM.

22. The generic reference model also allows mapping of the generic model official certificate using other international standards.

23. None of the models in this section limit or restrict the ability to include additional data, using a wider capability of the UN/CEFACT SPS standardized language, structure and exchange protocols, when bilaterally agreed between the competent authorities of the importing and exporting country. Examples of using this wider capacity are amongst others displayed on the second page of the file called ‘generic reference model’ in section 8.

---

26 Extensible Markup Language (XML) is the way the computer text is processed through a set of rules for encoding documents in a format that is both human-readable and machine-readable

27 XML Schema (XSD) is a recommendation of the World Wide Web Consortium (W3C) and specifies how to formally describe the elements in an Extensible Markup Language (XML) document

28 The World Customs Organisation Data Model (WCO DM) includes LPCO Base Information Package (BIP) that describes the use of the WCO DM for electronic Licenses, Permits, Certificates and Other kinds including a Food Safety Certificate.