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AND CERTIFICATION SYSTEMS

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DISCUSSION PAPER ON THE USE OF ELECTRONIC CERTIFICATES BY COMPETENT AUTHORITIES
AND MIGRATION TO PAPERLESS CERTIFICATION

(Prepared by the Netherlands)

INTRODUCTION

1. At its 21st session, during discussion on emerging issues and the direction of its future work, CCFICS agreed to consider a discussion paper, to be prepared by the Netherlands with the assistance of interested members and observers, on the development of guidance on the use of electronic certificates by competent authorities and migration to paperless certification.
2. The present discussion paper recognizes the importance of official guarantees from exporting countries to importing countries and the increasing role that certification systems play in providing such assurances to importing countries. It also recognizes the increasing sophistication of technologies supporting the provision and exchange of such certificates electronically.
3. An increasing number of countries are developing or have introduced electronic certification solutions. In recognizing the increasing use and availability of electronic information, it is important to consider its impact and probable benefits as well as the risks of using electronic certificates in lieu of paper certificates.
4. Abandoning paper certificates implies more than merely replacing paper certificates with electronic data. The process of the dematerialization of official certificates requires international guidance to ensure the development of modernized procedural systems that facilitate the reliable use of electronic certificates.
5. A number of countries already have achieved paperless trading, using electronic certificates through implemented electronic certification exchange¹ and drawing on the support of international standards, where they exist. However, such exchanges still require bilateral negotiations demanding considerable investments of time and money to achieve consistency. Best practices could be extracted from these achievements in developing Codex guidance.
6. Current international guidance in the area of the electronic exchange of information (electronic certification) is limited in focus and has not kept pace with developments at the practical level. The existing Codex guideline (CAC/GL 38-2001) provides limited guidance on the use and exchange of electronic certificates by competent authorities.
7. While Codex should not necessarily recommend a particular electronic certification system, it may be prudent to develop guidance on procedures that would support the electronic provision and exchange of certificates in a manner consistent with a view to removing the need for paper certificates in the future. Codex guidance would help broaden participation, promote consistency and simplify the process for countries developing electronic certification solutions.

¹ Australia and New Zealand have collaborated to develop and implement a web-based system for electronic certification, known as E-cert, which generates export certificates for traded food and agricultural commodities.

8. In 2009, the United Nations Centre of Trade Facilitation and Electronic Business (UN/CEFACT) approved guidance for governments on the electronic transmission of data exchanged between government inspection authorities involved in border clearance activities. Its purpose is to provide a standard framework for the exchange of information for traded agricultural products between government regulators involved in cross-border trade where export/import certification is required to facilitate entry of the product. The UN/CEFACT standard also incorporates International Organization for Standardization codes as well as United Nations Trade Data Elements Directory (UNTDDED) for data elements. While this work should also be taken into consideration in any future Codex work, it is highly process-specific and technically complex with regard to the requirements for transmission of data to be exchanged.

CONSIDERATIONS

9. Eliminating paper certificates requires an alternative way of thinking and a commitment by governments to follow an electronic path instead of the familiar paper path. An electronic certificate is much more than simply an electronic version of the existing paper certificate: it is an integral part of a certificate solution and offers competent authorities a solid opportunity for safe paperless trade.

10. Implementing paperless certification means much more than simply replacing paper certificates by electronic ones. Paperless procedures between exporting and importing countries need to be supported by the acceptance of electronic certificates by transiting countries. From this point of view, it is important to consider the challenges facing transit countries as well as importing and exporting countries when it comes to implementing procedural systems to facilitate the use of electronic certificates to further enhance certainties during the import, transit and export of food.

11. Obstacles to introducing paperless procedural systems may include entrenched familiarity with paper certificates bearing the original signature of a certifying officer and official stamp. It is important to realize that a thorough procedural system using electronic certificates would provide at least the same – and likely greater – certainties. International guidance on the development of procedural systems for the use of electronic certification between competent authorities during the import, transit and export of food is expected to encourage the dematerialization of official certificates needed in international food trade.

12. An increasing number of countries are developing or have introduced electronic certification solutions. It is therefore important to establish at the international level a common understanding and adequate definition of electronic certification.

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

- a. The electronic certification system of the importing country retrieves (“pulls”) or receives (the information having been “pushed”) certificate information directly from the electronic certification system of the exporting country through a web service interface (Simple Object Access Protocol [SOAP]).
- b. The electronic certification system of the exporting country provides certificates to the electronic certification system of the importing country through Simple Mail Transfer Protocol (SMTP).
- c. The electronic certification system of the importing country retrieves or receives certificate information, including digital evidence certification as recommended by UN-CEFACT, directly from the electronic certification system of the exporting country through a web service interface (SOAP).
- d. The importing country maintains a database in which the exporting country must insert the certificate information.
- e. The electronic certification system of the importing country receives certificate information from the electronic certification system of the exporting country through a central hub (being developed by the International Plant Protection Convention as ePhyto).
- f. The importing country consults a website maintained by the exporting country to view an image of a certificate.

14. The list above does not exclude other formats and forms of electronic certificates that could contribute to facilitating the dematerialization of the paper systems and procedures used by competent authorities.

15. International standards and recommendations are required for the exchange of electronic certificates between competent authorities. At the same time, it is important to realize that such exchange may not be the only way for importing countries to use electronic certificates for paperless procedures.

16. At present, electronic certificate information is used during import procedures with the primary purpose of providing enhanced security (to prevent use of fraudulent certificates) in addition to that of issued paper versions. A further objective would be to eliminate paper certificates in the international trade of food for countries using electronic certification solutions by developing guidance for competent authorities on procedural systems that guarantee the reliable use of electronic certificates.

17. The dematerialization of official certificates will also require support in the form of paperless transit procedures. Challenges may include the need to agree that, to optimize results for all stakeholders, in government and the private sector alike, will require close cooperation with customs. The World Customs Organization Data Model provides a reliable opportunity for competent authorities to make official reference to an electronic certificate that belongs to the consignment.

18. From the point of view of economic operators, specific commercial information gathered in electronic certification systems is sensitive. Paperless transit procedures should not facilitate the misuse of such sensitive commercial information in electronic certificates. Transit countries should not have direct access to detailed commercial information, for example on who is trading with whom.

19. The World Customs Organization is among the international organizations that, in specific situations, accept electronic confirmation of the issuance of a document in lieu of requiring the physical submission of the paper document.

20. Procedural systems developed to facilitate paperless trade in food should respect:

- a. international standards for official electronic certificates in international trade in food;
- b. international standards for certification systems used by competent authorities;
- c. international standardized mechanisms to exchange certificate information between competent authorities; and
- d. the relevant risk management requirements for information technology security.

21. The advantages of dematerializing official paper certificates for import, export and transit procedures include:

- a. enhanced certification security;
- b. earlier awareness of consignment movements;
- c. more efficient export and transit procedures and import clearance; and
- d. increased ability to gather, track and analyse data protecting sensitive commercial information.

22. Codex has developed only limited international guidance for the dematerialization of certificates for import, export and transit procedures and paperless trade in food.

23. Relevant UN/CEFACT work should be taken into consideration in any future such work by Codex.

24. International guidance is necessary to assist countries in developing and applying paperless procedural systems that facilitate the reliable use of electronic certificates for the import, export and transit of food.

25. The development of Codex guidance to support dematerializing official paper certificates will need to take into consideration a number of key areas, including:

- i. the need to develop a definition of electronic certificates;
- ii. the use of defined data elements;
- iii. the aid to determine a suitable concept of electronic certification solution to produce and exchange certificates along with the necessary security requirements;
- iv. the need to protect authenticity and integrity of exchanged certificates, for example through application of the digital evidence certification recommendation of UN-CEFACT;
- v. existing international standards and recommendations; and
- vi. the different circumstances of Codex members.

26. Transit consignments are always, without exception, under the responsibility of customs authorities. Data exchange with customs could therefore facilitate a reliable reference for electronic certificates during transit procedures and protect sensitive commercial information.

RECOMMENDATIONS

27. The Committee is invited to support the development of a definition of electronic certificates in food and to support the revision of Section 4, Principle E; Section 8; and paragraphs 39 and 42 of Codex guideline (CAC/GL 38-2001) with a view to improving guidance to competent authorities in accepting paperless certification for the import and export of food.

28. The Committee is invited to establish an electronic working group to develop draft Codex guidance and/or principles, for discussion at its 23rd session, on procedural systems that facilitate the use of electronic certificates together with electronic certificate solutions in a reliable and trusted way for the paperless import, export and transit of food.