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منظمة الأغذية والزراعة للأمم المتحدة | 联合国粮食及农业组织 | Food and Agriculture Organization of the United Nations | Organisation des Nations Unies pour l'alimentation et l'agriculture | Продовольственная и сельскохозяйственная организация Объединенных Наций | Organización de las Naciones Unidas para la Agricultura y la Alimentación

هيئة تدابير الصحة النباتية

الدورة الرابعة

روما، 30 مارس/آذار – 3 أبريل/نيسان 2009

آخر المعلومات عن إصدار الشهادات الإلكترونية

البند 15-2 من جدول الأعمال المؤقت

1- ناقشت الهيئة المؤقتة لتدابير الصحة النباتية في دورتها السابعة (2005) الأهمية المتنامية لتطوير نظم إصدار الشهادات الإلكترونية في مجال الصحة النباتية. وكان هناك تأييد عام للترويج لإصدار الشهادات الإلكترونية باعتباره من الأولويات. وأشير في ذلك الحين إلى أنّ مركز الأمم المتحدة لتيسير التجارة والأعمال التجارية الإلكترونية قد أعطى مزيداً من المعلومات واتُفق على أنه من الأنسب الاضطلاع بهذا العمل خارج نطاق برنامج العمل العادي لوضع المعايير. واتفقت الهيئة المؤقتة لتدابير الصحة النباتية على إنشاء مجموعة عمل تتولى صياغة توصيات على مستوى السياسات بخصوص إصدار الشهادات الإلكترونية.

2- وبحثت هيئة تدابير الصحة النباتية في دورتها الأولى (2006) حصيلة عمل مجموعة العمل المعنية بإصدار الشهادات الإلكترونية في مجال الصحة النباتية[1]. واتُفق على ضرورة أن تتابع أمانة الاتفاقية الدولية لوقاية النباتات جميع التحديات الناشئة عن اعتماد الشهادات الإلكترونية في مجال الصحة النباتية وتطبيقها على المستوى العالمي وأن تساعد في التصدي لها عند الاقتضاء وحسب الملائم. وطُلب أيضاً إلى الأمانة إعداد تقديرات لتكاليف تطبيق الشهادات الإلكترونية.

[1] يمكن الاطلاع على تقرير مجموعة العمل المعنية بإصدار الشهادات الإلكترونية في مجال الصحة النباتية على الموقع الإلكتروني للبوابة الإلكترونية الدولية للصحة النباتية: https://www.ippc.int/id/111815. وبالإمكان كذلك الاطلاع على تقارير هيئة تدابير الصحة النباتية في الموقع نفسه على العنوان التالي: https://www.ippc.int/id/13393?language=en.

3– ومنذ العام 2006، أُطلق عدد من المشاريع الثنائية لإصدار الشهادات الإلكترونية في مجال الصحة النباتية، فيما وضع مركز الأمم المتحدة لتيسير التجارة والأعمال التجارية الإلكترونية اللمسات الأخيرة على المعيار العالمي لإصدار الشهادات الإلكترونية.

4– وسعت أمانة الاتفاقية الدولية لوقاية النباتات إلى البقاء على اطلاع على آخر التطورات في مجال إصدار الشهادات الإلكترونية من خلال مشاركتها مباشرة في الاجتماعات ذات الصلة أو من خلال مشاركة منظمة الأغذية والزراعة فيها. ولكنّ هذه المشاركة بقيت ضعيفة بسبب القيود الكبرى على الميزانية في السنوات القليلة الماضية.

5– وطلب مؤخراً عدد من الأطراف المتعاقدة والمشاورة الفنية بين المنظمات الإقليمية لوقاية النباتات إطلاعها على آخر المعلومات على صعيد تطوير نظام إصدار الشهادات الإلكترونية في مجال الصحة النباتية. لكن تعذر الحصول حينها على معلومات أو تكوين فكرة عامة عن الموضوع على المستوى العالمي. وبطلب من الأمانة، قدّمت هولندا استعراضاً تضمّن آخر المعلومات خلال الدورة الرابعة لهيئة تدابير الصحة النباتية. ويمكن الاطلاع على الاستعراض في المرفق 1.

6– وقد جرى تقديم عدد من الاقتراحات الثنائية والمتعددة الأطراف في السنوات الأربع الأخيرة بغية إحراز تقدم على هذا الصعيد. غير أنه لم يتم الاتفاق على طريقة عمل موحّدة للاتفاقية الدولية لوقاية النباتات ككلّ.

7– ورغم التأييد الكبير من قبل عدد من الأطراف المتعاقدة لإصدار الشهادات الإلكترونية في مجال الصحة النباتية، يبدي عدد متزايد من الأطراف المتعاقدة (وفي طليعتهم البلدان النامية) تحفظات جديّة على تطبيق نظم إصدار الشهادات الإلكترونية في مجال الصحة النباتية. ويُعبّر عن هذه التحفظات من حيث الموارد اللازمة والأولويات الوطنية على صعيد الصحة النباتية والقيود المشار إليها للعملية التي يقودها مركز الأمم المتحدة لتيسير التجارة والأعمال التجارية الإلكترونية على اعتبار أنها لا تلبي بشكل خاص الاحتياجات المتصلة بالصحة النباتية، بل إصدار الشهادات الإلكترونية بوجه عام.

8– وتعلّق الآمال حالياً على "حلقة العمل الدولية عن إصدار الشهادات الإلكترونية" (*International E-Cert Workshop*) التي ستعقدها منظمة وقاية النباتات في أمريكا الشمالية في مدينة أوتاوا، كندا من 19 إلى 21 مايو/أيار 2009 وهي ستشكل منتدى لمناقشة جميع هذه المواضيع بحريّة تامة، كما أنّ المشاركين سوف يكتسبون من خلالها فهماً أفضل لإصدار الشهادات الإلكترونية في مجال الصحة النباتية، فضلاً عن التوصل إلى اتفاق حول كيفية تنسيق العمليات وتوحيدها. وقد تعهّدت الاتفاقية الدولية لوقاية النباتات بالمشاركة في هذا الاجتماع.

9– ويرجى من هيئة تدابير الصحة النباتية أن:

1– *تأخذ علماً* بآخر المعلومات عن حالة إصدار الشهادات الإلكترونية في مجال الصحة النباتية.
2– *توصي* بتقديم مزيد من المعلومات المحدّثة في الدورة الخامسة لهيئة تدابير الصحة النباتية.

المرفق 1

The State of Electronic Phytosanitary Certification[2]

1. Introduction

Making arrangements for phytosanitary certification is one of the requirements of the IPPC (Art. V.1.). For many years this has already been one of the core elements of safe trade in plants and plant products. Phytosanitary certificates are usually exchanged on paper, while in many other fields (of information exchange e.g. food safety and animal health) this is increasingly done by electronic means. The IPPC includes a provision on electronic certification (Art. V.2.) as does ISPM No. 12 (section 1.2). It is the expectation that in the coming years the use of electronic phytosanitary certificates will gain momentum. A lot of preparatory discussions and work has been done and it is now time to actually start implementing the exchange of electronic phytosanitary certificates. This paper summarizes the state of electronic certification in the phytosanitary field, identifies outstanding issues to be discussed and suggests ways forward.

2. Definition

An IPPC working group that met in Wageningen in 2006 recognized that electronic phytosanitary certification had not been defined by the Glossary Working Group. However, for the purpose of that meeting, electronic phytosanitary certification was considered as being the provision of phytosanitary information electronically from an exporting NPPO to an importing NPPO. Thus, electronic certification is the issuance and communication of phytosanitary certificates in electronic form. Although very useful in the whole process, text processing programmes or other electronic generation of paper forms, which are then distributed by traditional means, is not meant by electronic certification (see the Report of the IPPC working group on electronic certification, January 2006, can be found at https://www.ippc.int/id/111815).

3. Importance of electronic certification

Electronic certification is very important in streamlining administration associated with increasing global trade. Electronic exchange of information is much faster than use of paper certificates, enabling NPPOs of the importing country to anticipate on consignments that are expected. A big advantage of electronic information is that once this information is entered into an electronic system, it can be used for different purposes both at the exporting and in the importing country. This multiple use of data can be for e.g. Custom purposes, phytosanitary inspection at import, re-use for recertification or preparing notifications of interception. It is, however, important that the phytosanitary integrity is maintained. Electronic certification can even increase this integrity by direct communication between NPPOs, thereby minimizing the possibilities for fraud with the certificates.

4. Elements of electronic certification

To exchange electronic certificates worldwide between NPPOs of all countries, the format of the message should be harmonized / standardised. Firstly, this electronic format should contain all the elements of a certificate as agreed in ISPM No. 12. It is, however, for good communication and understanding, very important that the format is standardized as is done

[2] This paper was prepared by, Mr Nico Horn, Netherlands Plant Protection Service, Wageningen, 6 February 2009.

under the IPPC for the paper version of a certificate. Moreover, it is important to integrate these elements needed for phytosanitary purposes with those needed for other purposes, e.g. for animal health and for logistics.

Once the format of the electronic certificate is standardized, the mode of transmission of electronic certificates is also very important. This should also be undertaken in a standardized way as to avoid that NPPOs have to communicate electronic certificates in a different way depending on the country of destination i.e. mode of transmission between countries needs to be standardised to facilitate communication between all trading partners in the same way. This would substantially reduce the complexity of computer systems, reduce costs and sped up communication.

Another important element is the issue of security and authenticity. It is essential that electronic certificates could only be issued by authorized persons under the responsibility of the NPPO. Furthermore, it should be guaranteed that the contents of an electronic certificate cannot be changed after issuance or during transmission and can be used only once for an imported consignment. Moreover, the link between the electronic information and the consignment concerned should be unambiguous.

The way electronic certificates are produced by the NPPO or are received within a national system is up to each NPPO. Some countries have a complete electronic system to facilitate the process of export inspection and certification resulting an electronic certificate (i.e. not paper) or NPPOs may produce the electronic certificate manually on a computer at the border or point of inspection. In such cases, or any other system in between, electronic certification as information exchange between NPPOs worldwide is possible. Electronic information exchange by the use of electronic certificates is certainly facilitated by a national (internal) electronic information management system for the certification process and the inspection process at import. Such national electronic information management systems also allow for combining these electronic processes with information exchange in other fields, thereby greatly enhancing the benefits of electronic exchange of information. The use of electronic phytosanitary certificates is, however, independent of the way the electronic certificates are generated.

Many more questions will come up, e.g. how should re-export certificates be issued. The best way to make a good, harmonized system of electronic certification that works well globally is to start on a small scale and discuss all problems and questions encountered, and agree on a way forward.

5. Format of the electronic certificate

The format/standard layout of the **electronic certificate** transmitted electronically should be in line with ISPM No. 12, containing all the necessary elements as described in this ISPM and should be in line with the format used for other purposes to fully benefit from electronic information exchange. A standard digital format has been extensively discussed by UN/CEFACT with the objective of achieving consistency between the format for phytosanitary, veterinary and other trade purposes. In fact, the information needed for phytosanitary certificates is integrated with the format recommended for all kind of agricultural trade purposes. These discussions are now finalized and the UN/CEFACT XML standard for electronic transfer of certification data is recommended. This is extensively described in the report of the UN/CEFACT meetings (http://www.unece.org/Welcome.html).

6. Mode of transmission

On the mode of transmission of the electronic certificates there are still a number of issues to be decided upon. IF the XML format referred to in section 5 is used, then the specifications of national systems are not critical, provided they accept and can interpret the XML electronic certificates. However, questions that still need to be addressed include:

- Should the electronic certificate be communicated directly between the exporting and importing country or is an intermediate a preferred solution?
- Should the electronic certificate be communicated directly between the NPPOs of the exporting and importing party or should the trader play a role?
- Should the exporting country initiate the exchange of information (push) or should the importing country initiate it and get the certificate actively out of the system of the exporting country (pull)?
- Should the communication be via internet connection or through a secured intranet system, for instance developed under the IPPC umbrella, or is there another alternative?

Moreover, it is essential that an unambiguous link is present between the electronic information and the consignment concerned.

7. Security and authenticity

It is essential that electronic certificates can only be issued by authorized persons under the responsibility of the NPPO. Furthermore, it should be guaranteed that the contents of an electronic certificate cannot be changed after issuance and can be used only once for importing a consignment.

In this regard there are also still a number of open issues to be discussed and harmonized:

- How should the communication be protected?
- Should the communication be encrypted?
- How does an electronic certificate get its official status?
- How does the status of an electronic certificate change after use?
- Can the signature and the stamp of the inspector be substituted by an electronic means of authorisation? And what type of authorisation should that be?

For all these elements it is good to realize that worldwide secure systems have already been developed for other purposes, e.g. banking. For electronic certification an existing system could perhaps be used in stead of developing a new one.

8. The revision of ISPM No. 12

Moreover, in the IPPC expert working group on the revision of ISPMs No. 7 and 12 that met in February 2008, the meeting agreed to explore the incorporation of the standard elements for electronic phytosanitary certification based on the UN/CEFACT initiative, including the XML format, as a supplement to ISPM No. 12. The UN/CEFACT working group has accommodated all elements of the phytosanitary certificate in the system fully in line with ISPM No. 12. Although the revision of ISPM No. 12 has not been finalised yet, this revision is scheduled for possible adoption at an upcoming CPM, pending review by the Standards Committee and member consultation.

9. Initiating electronic certification systems

Electronic certification will not start overnight for all trades in agricultural products between all countries of the world. Some countries are ready and willing to start now, while others are not at all yet willing to initiate such a project. However, when initiating such a project, it is

best to start at a small scale between those trading partners that are ready now and learn from the process in practice. All countries can then benefit from these experiences. It is inevitable that paper and electronic certificates will coexist for many years to come, not so much for one particular consignment but within trade for different commodities or for different commodities. During a pilot project, a paper certificate may accompany commodities and an electronic certificate is also exchanged, one of the two should be enough but they are not both needed for one consignment. Therefore, such pilot projects should move as soon as possible to the use of electronic certificates only. Any country that wishes to follow can benefit from the experiences in these pilots.

10. Recent experience

In some countries, systems for electronic certification are already operational or such systems are available for use in future electronic certification. An example is the system running in New Zealand and Australia. These countries have systems operational for electronic certification and information exchange of veterinary products. New Zealand has organised this in different ways for export to different countries. Their experiences could be used for developing electronic certification in the phytosanitary field.

The Japanese MAFF has developed a system for electronic communication within the country that is used by customs and phytosanitary inspection authorities. The process of entry and departure of consignments is supported by an electronic system that is also in use by phytosanitary inspectors. Although the system is for domestic use only, this may offer a good base for the exchange of electronic information in international trade in future.

In the Netherlands, there is already many years experience with an electronic system for the import process (CLIENT-import) connected to Custom authorities in which an electronic certificate can be incorporated. A system for the process of export and for producing electronic certificate (CLIENT-export) is now operational in the Netherlands for seed potatoes and for seeds for sowing. Systems for other commodities are currently under development. The Netherlands is able to cooperate with other countries that are ready to receive electronic certificates for these commodities and with countries that are ready to send electronic certificates for any commodity.

In the USA and Canada there are also electronic systems operational that can generate electronic certificates. The same is the case for the Russian Federation and certainly in many more countries such initiatives have been taken or are underway. This creates the right circumstances for trading partners to link their systems for the electronic exchange of phytosanitary certificates.

11. Current challenges

Now that there is a proposal for the format of communication, developed by the working group UN/CEFACT both for phytosanitary and veterinary purposes, it is believed that this proposal should be incorporated in ISPM12 and adopted by CPM. The next step is to work on solutions for the issues related to mode of transmission, as described in paragraph 6 and 7 of this paper. This has to be discussed amongst NPPO users and ICT specialists. The workshop that is organized by NAPPO in May 2009 in Canada is a good opportunity to discuss these issues. We can still have very lengthy discussions but it is time now to take decisions on these issues and start working with it in practice. It would be good if worldwide arrangements for pilot projects on electronic certification could be agreed bilaterally between NPPOs of trading countries and that such pilots could start as soon as possible, preferably in 2009. To make optimal use of these experiences in pilots, a yearly evaluation would be beneficial in the first

few years. For this purpose, it is advisable to start a working group that may also make proposals to solve the issues encountered in these pilots.

Many (electronic) information management systems are available to NPPOs, or under development, it is time now to link these systems and make optimal use of them by starting exchanging electronic phytosanitary certificates.