Economic Commission for Europe
Inland Transport Committee
Working Party on Customs Questions affecting Transport
Group of Experts on Legal Aspects of the Computerization of the TIR Procedure

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Item 3 of the provisional agenda
Compatibility of the eTIR legal framework with national legal requirements

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Note by the secretariat

I. Introduction

1. At its second session, the Group of Experts on Legal Aspects of the Computerization of the TIR Procedure (GE.2) decided to conduct a survey with the objective of collecting information on (a) the various methods of authentication used at customs offices of departure, (b) the various specificities (implementation and processing) of the use of electronic signatures in particular, (c) on the legal status/validity of electronic communications (including electronic signatures) in domestic jurisdictions, such as, but not limited to, their admissibility as evidence in national court proceedings. Further to this, GE.2 had requested the secretariat to prepare the draft survey, circulate it to all participants of GE.2 electronically for comments and inputs as well as finalize and launch it prior to the next session of GE.2. In line with this request, the secretariat prepared and launched the survey electronically in September 2016, following electronic consultations and approval of GE.2, and had compiled the preliminary results of the survey for discussion at the third session.

2. At its third session, GE.2 welcomed the preliminary results of the survey and requested the secretariat to revise the document to indicate more details about the various replies. GE.2 also was of the view that the results would be more representative if more Contracting Parties, particularly outside of the European Union (EU) and the New Computerized Transit System (NCTS), would reply. Against this background, the Secretariat requested the Contracting Parties, who had not yet done so, to reply to the survey by end of April 2017. Only one additional reply was received. The present
II. Analysis of the survey results

A. General remarks

The survey was replied by following thirty-four Contracting Parties: Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Greece, Hungary, Iran (Islamic Republic of), Ireland, Italy, Kyrgyzstan, Latvia, Lithuania, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Sweden, Switzerland, the FYR of Macedonia, Turkey and United Kingdom. Among these thirty-four respondents, there were three Eurasian Economic Union (EEU), twenty-two European Union (EU) and twenty-seven New Computerised Transit System (NCTS) countries. Most of the questions were replied to, and additional information and comments were provided when necessary.

B. Analysis of individual sections

Section 1: General

This section, which consists of two sets of questions that look at computerization of procedures and electronic authentication by customs, received the highest number of replies from respondents, while Question 1 in this Section was replied to by all respondents of the survey. Results indicate that all respondents have IT infrastructure in place for processing Customs declarations and data-exchange and, furthermore, they carry a development agenda in both fields. There seems to be a requirement for authentication for electronic declarations in all countries and this is mostly done by “usernames and passwords” and/or “Public Key Infrastructure (PKI) electronic signature”.

Question 1

(i) In your country can a customs declaration be submitted electronically?

Almost all countries have electronic declaration, and for those three countries who replied “in some cases” there is some sort of infrastructure in place and according to their replies to Question 1/iii, they are planning to improve it.

(ii) Do customs authorities in your country exchange data contained in customs declarations electronically at the national and/or international level?

Almost all countries gave a clear “yes” reply to this question. Whereas six countries replied “in some cases” and “no”, it is observed from the comments section that these countries are also exchanging data both at the national and international level. So, other than a possible misunderstanding about this question, it is evident that all Customs authorities are capable of data exchange.

(iii) Are customs authorities in your country planning to move to a computerized environment that will allow electronic declaration and data exchange in the future?

All countries who did not give a “yes” answer to previous two items replied to this question positively which indicates a commitment to further improving existing infrastructure.

1 This chapter is not numerated in order to avoid any overlap with survey numbering.
Question 2

(i) *Does information/data submitted electronically (such as advance cargo information) need to be authenticated?*

Almost all respondents indicated a requirement for authentication in this question. However, there are four countries, members of EEU and EU, which require authentication “in some cases” based on the type of declaration, the status of the declarant or technical capabilities.

(ii) *Please select the method or methods used by customs in your country for the authentication of the person sending electronic information (you can select more than one):*

It is evident from this question that “usernames and passwords” and/or “Public Key Infrastructure (PKI) electronic signature” are the mostly applied methods of authentication, and it is very common that a customs authority uses more than one method. It can be also concluded that there is no standardization in terms of the method used for authentication in customs unions or among NCTS countries. Still, number of countries preferring “usernames and passwords” is slightly ahead of those preferring PKIs across customs unions or among NCTS countries.

Section 2: Public Key Infrastructure (PKI) Electronic signatures

This section searches for information on the legal validity of and the conditions for using the Public Key Infrastructure (PKI) electronic signature specifically, both within the customs context and in general. Questions in this section were responded to by almost all countries. Results indicate that PKI electronic signatures are widely used by customs. In most countries, PKI electronic signatures have a legal basis and benefit from acceptance at court proceedings. On the other hand, in only a limited number of countries the legal basis is broadly permissive; in most countries there is prescriptive legislation in force. Non-residents are also able to obtain signatures in most countries. As for the use of signatures generated using a certificate issued by foreign certification authorities, there is not a liberal practice in general. Such signatures are accepted only in a limited number of countries based on inter-governmental agreements (including customs unions) or the recognition of a certification authority.

Question 3

(i) *Do the laws in your country currently allow for the use and legal validity of PKI electronic signatures in general?*

Almost all countries replied to this question positively, indicating the legal validity of PKI electronic signatures in their countries. There are four countries, both NCTS and non-NCTS, where PKI electronic signatures are not valid.

(ii) *Please select the type of legislation in force:*

This question indicates that there is a limited number of countries where the legislation is broadly permissive on electronic signatures, 5 of which are EU and 2 are non-EU NCTS countries. Most countries replied that their legislation is prescriptive in the sense that it prescribes specific technical methods to electronically sign a document, 12 of which are EU Members, 2 EEU members and 2 non-EU NCTS countries. There are only four countries who indicated a two-tier legislation in force, 3 of which are EU members.

Question 4

*Are PKI electronic signatures in the context of customs and trade transactions between operators and public authorities admissible as evidence in court proceedings in your country?*
All countries (except two) indicated that PKI electronic signatures are considered as evidence in court proceedings. In most of the replies, it was indicated as evidence with high relevance and having equal legal validity with a manual signature. In few cases, it may have lower value than manual signature depending on the case or technology used. It is worth emphasizing that answers are cross-cutting across different customs unions, therefore there does not seem to be a standard applicable union-wide. However, it is noticeable that most EU countries responded the question positively with a high relevance attributed to the evidence (option “a”).

Question 5

(i) In your country, do Customs authorities accept the use of PKI electronic signatures generated using a certificate issued by foreign certification authorities?

This question reveals that in most countries customs authorities do not accept the use of PKI electronic signatures generated using a certificate issued by foreign certification authorities. 10 of 17 countries in this group are EU members, whereas the rest is distributed among EEU, non-EU NCTS and other countries. Furthermore, in countries where it is allowed, it can be used under specific conditions. There are 11 countries in this group and almost all are EU members.

(ii) Please select the applicable conditions/restrictions which apply to the acceptance of PKI electronic signatures generated using a certificate issued by foreign certification authorities:

Mainly the positive respondents of the previous question answered this question, so that almost all were EU members. The answers to this question are divided among the options provided in close rates and also distributed among countries representing different customs unions and regions. However, it is clear that for the EU countries the legal framework was set by Regulation (EC) No 910/2014/EU (eIDAS Regulation). The respondents indicated that, according to this Regulation, the certificate has to be issued by a certification authority that is in the Trusted Services List (TSL), which is also published in accordance with the Regulation. As for non-EU countries, since they mostly indicated in the previous question that certificates issued by foreign certification authorities are not accepted, there were only two non-EU respondents to this question. Both of these countries required a bilateral or multilateral agreement with the country where the certificate is issued.

Question 6

In your country, can a non-resident obtain a certificate for a PKI electronic signature?

Most of the countries responded this question positively, hence allowing a non-resident obtain a certificate for a PKI electronic signature. Although some indicated this possibility only “under specific conditions”, these conditions mostly seem procedural, such as for example, verification of the person. It is also worth emphasizing that the answers are cross-cutting among different customs unions as well as NCTS countries. Still, there is a significant amount of countries who do not allow a non-resident obtain a PKI.

Section 3: Electronic authentication mechanisms for eTIR

This section aims to collect information on preferences and practicalities relating to electronic authentication in the eTIR context in particular. Most countries responded to the questions in this section, only slightly less than previous sections. This section indicates that countries consider it necessary that a person submitting data electronically is always authenticated, thus, the holder submitting advance cargo information for eTIR needs to be authenticated each time. On the other hand, there is not a specific tool indicated as the
necessary authentication mechanism. With regard to the use of PKI electronic signatures in eTIR, the number of countries who can accept an internationally recognized certification authority is slightly higher than the number of those not in favour of this option. Countries with positive approach to internationally recognized certification authority are also mostly interested in developing such a certification authority within the eTIR legal framework.

**Question 7**

Do you consider it necessary that the holder (or his representative) authenticates himself at the time of the electronic submission of the advance cargo information (by means of using an electronic signature or any other type of electronic authentication mechanism), bearing in mind that in the future eTIR system the customs declaration will be lodged and accepted at the moment when the holder (or his representative) presents the goods, the vehicle and a reference to the advance cargo information to the customs office of departure?

It is clear from the responses to this question that almost all countries will require the holder (or his representative) to authenticate himself at the time of the electronic submission of the advance cargo information in the future eTIR system. In terms of the mechanism to be used for authentication, most countries welcome mechanisms other than PKI electronic signatures as well. The answers to this question are also distributed among different groups of countries. However, at least it can be concluded that most EU countries seem to be open to different methods of authentication.

**Question 8**

(i) In your view, would it be possible that the Customs authorities of your country could accept PKI electronic signatures for eTIR in particular, if these were issued or certified by an internationally recognized certification authority (i.e. a certification authority that would be recognized by an international legal instrument, such as the eTIR legal framework)?

With regard to the use of PKI electronic signatures that are issued or certified by an internationally recognized certification authority in eTIR system, although the majority of countries replied positively, the rate of negative answers is close to the positive. Whereas EU members, NCTS countries and other countries were divided between two answers, two EEU members who responded to the question both went for a negative answer.

(ii) If yes, would your government be interested that such certification authority would be developed within the eTIR legal framework?

Almost all countries who declared they may accept the use of PKI electronic signatures generated by an internationally recognized certification authority, consider that such an authority can be developed within the eTIR legal framework.

**III. Considerations by the Group of Experts**

3. The survey indicates the diversity of methods used by TIR Contracting Parties for electronic authentication, as well as the limitations on the use of signatures generated using a certificate issued by foreign/international certification authorities. GE.2 is invited finalize its considerations on the survey, bearing in mind that the results continue to seem to confirm the approach discussed on the draft provisions under agenda item 6.
Annex

Section 1: General

Question 1
(i) In your country can a customs declaration be submitted electronically?
   (a) Yes;
   (b) In some cases;
   Please specify (max 300 characters):
   (c) No.
(ii) Do customs authorities in your country exchange data contained in customs declarations electronically at the national and/or international level?
   (a) Yes;
   (b) In some cases;
   Please specify (max 300 characters):
   (c) No.
(iii) Are customs authorities in your country planning to move to a computerized environment that will allow electronic declaration and data exchange in the future?
   (a) Yes;
   (b) No.
Comment (max 300 characters):

Question 2
(i) Does information/data submitted electronically (such as advance cargo information) need to be authenticated?
   (a) Always;
   (b) In some cases;
   Please specify (max 300 characters):
   (c) No.
(ii) Please select the method or methods used by customs in your country for the authentication of the person sending electronic information (you can select more than one):
   (a) Usernames and Passwords;
   (b) Symmetric key authentication;
   (c) SMS based;
   (d) Public Key Infrastructure (PKI) electronic signature;
   (e) Other.
   If other, please specify (max 300 characters):
Section 2: Public Key Infrastructure (PKI) Electronic signatures

Question 3

(i) Do the laws in your country currently allow for the use and legal validity of PKI electronic signatures in general?
   (a) Yes;
   (b) No.

(ii) Please select the type of legislation in force:
   (a) Broadly permissive (only few legal restrictions);
   (b) “Two-tier” (generally permitted, but specific approved technologies are considered of higher security/legal value/reliability);
   (c) Prescriptive (prescribes specific technical methods to electronically sign a document).

Question 4

Are PKI electronic signatures in the context of customs and trade transactions between operators and public authorities admissible as evidence in court proceedings in your country?
   (a) Yes, and they are considered as evidence with high relevance (and equal legal validity with manual signature) for the outcome of the case;
   (b) Yes, but their value as evidence compared to manual signature is generally lower or determined on a case by case basis;
   (c) Either high or low value as evidence depending specifically on the technology used;
   (d) No, not accepted as evidence.

Question 5

(i) In your country, do Customs authorities accept the use of PKI electronic signatures generated using a certificate issued by foreign certification authorities?
   (a) Yes;
   (b) Yes, under specific conditions;
   (c) No.

(ii) Please select the applicable conditions/restrictions which apply to the acceptance of PKI electronic signatures generated using a certificate issued by foreign certification authorities:
(a) The certificate has to be issued by a foreign certification authority that my country recognizes as reliable;

(b) The certificate has to be issued in a country with which my country has a relevant bilateral or multilateral agreement(s);

(c) The certificate has to be issued within the customs union of which my country is part;

(d) Other.

If other, please specify (max 300 characters):

Question 6
In your country, can a non-resident obtain a certificate for a PKI electronic signature?

(a) Yes;

(b) Yes, under specific conditions;

Please specify (max 300 characters):

(c) No.

Section 3: Electronic authentication mechanisms for eTIR

Question 7
Do you consider it necessary that the holder (or his representative) authenticates himself at the time of the electronic submission of the advance cargo information (by means of using an electronic signature or any other type of electronic authentication mechanism), bearing in mind that in the future eTIR system the customs declaration will be lodged and accepted at the moment when the holder (or his representative) presents the goods, the vehicle and a reference to the advance cargo information to the customs office of departure?

(a) Yes, a person submitting data electronically to customs needs to be always authenticated (by means of either a PKI electronic signature or any other type of electronic authentication mechanism)

(b) Yes by means of PKI electronic signature only;

(c) Yes, by means of other authentication mechanism(s);

Such as (please list) (max 300 characters):

(d) No, electronic authentication is not needed because the holder can always be identified in case of irregularity;

(e) No, electronic authentication is not needed because the holder (or his representative) can be authenticated when presenting the goods and the vehicle at the customs office of departure.
Question 8

(i) In your view, would it be possible that the Customs authorities of your country could accept PKI electronic signatures for eTIR in particular, if these were issued or certified by an internationally recognized certification authority (i.e. a certification authority that would be recognized by an international legal instrument, such as the eTIR legal framework)?

(a) Yes;
(b) No.

(ii) If yes, would your government be interested that such certification authority would be developed within the eTIR legal framework?

(a) Yes;
(b) No.