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ROAD TRANSPORT

Additional Protocol to the Convention on the Contract for the International Carriage of Goods by Road (CMR) concerning the Electronic Consignment Note

Comments by the secretariat of the United Nations Commission on International Trade Law (UNCITRAL)

Protocol Additional to the Convention on the Contract for the International Carriage of Goods by Road (CMR)
Concerning the Electronic Consignment Note

Comments by the secretariat of the United Nations Commission on International Trade Law (UNCITRAL)

1. The secretariat of the United Nations Commission on International Trade Law (UNCITRAL) appreciates the opportunity to contribute to the work of the ECE Working Party on Road Transport ("the ECE Working Party") to remove possible legal obstacles to the use of electronic communications under the Convention on the Contract for the International Carriage of Goods by Road (Geneva, 19 May 1956) (hereafter "the CMR Convention").

2. Consistent with its mandate to further the progressive harmonization and unification of the law of international trade and to coordinate legal activities in this field, in particular to avoid duplication of efforts and to promote efficiency, consistency and coherence in the modernization and harmonization of international trade law, as reaffirmed in General Assembly resolution 59/39, of 2 December 2004, UNCITRAL supports and encourages the efforts by the ECE Working Party to facilitate the use of electronic communications in connection with road carriage contracts.

Introduction

3. UNCITRAL had been following the work of the ECE Working Party with particular interest in view of its close relationship to UNCITRAL's efforts to remove possible legal barriers to the use of electronic commerce, which might result from international trade law instruments. The latest step in that work has been the approval by UNCITRAL, at its 38th session (Vienna, 4-15 July 2005), of a draft Convention on the Use of Electronic Communications in International Contracts, which will be submitted to the General Assembly for adoption at its 60th session, in the Fall of 2005.[1]

4. In the course of its work, UNCITRAL had reviewed legal issues related to the use of electronic communications under various existing trade-related agreements, including the CMR Convention. That work originates in a recommendation that had been adopted on 15 March 1999 by the ECE Centre for the Facilitation of Procedures and Practices for Administration, Commerce and Transport (now known as the Centre for Trade Facilitation and Electronic Business, CEFACT). CEFACT had reviewed possible obstacles to electronic commerce in a number of trade-related international instruments, including various customs and transport-related instruments that had been negotiated under the auspices of ECE. CEFACT recommended that UNCITRAL consider the actions necessary to ensure that references to "writing", "signature" and "document" in conventions and agreements relating to international trade allowed for electronic equivalents.[2]

A. Legal issues relating to the use of electronic communications under the CMR Convention

5. On the basis of the recommendation made by CEFACT, UNCITRAL decided to consider possible obstacles to electronic commerce under existing international treaties and conventions, but requested the UNCITRAL secretariat to expand the scope of the initial CEFACT survey. The results of the Secretariat's expanded survey[3] are reflected in the annex to a Note by the Secretariat published on 14 February 2002 (A/CN.9/WG.IV/WP.94).

6. The review of legal issues related to the use of electronic communications under the CMR Convention is contained in paragraphs 87 to 104 of that Note, which are reproduced below:

"*(a) Possible obstacles to the use of electronic communications under the Convention*

"87. The provisions of the Convention that have special relevance for the use of electronic communications may be generally grouped under two categories: (a) provisions concerning the instrument of the contract of carriage (consignment note); and (b) provisions that contemplate notices or declarations that may be exchanged by the parties.

"*(i) Provisions concerning the instrument of the contract of carriage (consignment note)*

"88. Article 4 of the Convention requires that contract of carriage "be confirmed by the making out of a consignment note" even though "the absence, irregularity or loss of the consignment note shall not affect the existence or the validity of the contract of carriage", which shall remain subject to the provisions of the Convention. The Convention does not define the consignment note, but the reference, in article 5, paragraph 1, to its issuance in three "original copies signed by the sender and by the carrier" clearly suggests that the Convention contemplates the issuance of the consignment note as a paper document. This is even more evident in the light of the last sentence of article 1, paragraph 1, which provides that "the first copy [of the consignment note] shall be handed to the sender, the second shall accompany the goods and the third shall be retained by the carrier".

"89. As pointed out in the CEFACT survey, there are some potential problems if a paper document is not produced and automation is permitted only to the extent of allowing signatures to be printed or stamped and then only if the law of the country in which the note is produced so permits (art. 5, para. 1) (TRADE/CEFACT/1999/CRP.7, para. 2.10.3).

"*a. The consignment note as proof of the contract of carriage*

"90. In its most basic function, the consignment note is a document that proves the existence of the contract of carriage and its terms. Indeed, article 9, paragraph 1, provides that "the consignment note shall be prima facie evidence of the making of the contract of carriage, the conditions of the contract and the receipt of the goods by the carrier". This evidentiary function could arguably be fulfilled by data messages, provided that their functional equivalence to paper-based consignment notes is legally recognized. However, where no such general recognition exists, courts might find that the exchange of data messages is not equivalent to the making out of a "consignment note" under the Convention.

"91. The consequences of such a finding for the parties may be significant. Under article 6 of the Convention, a consignment note is required, inter alia, to incorporate a statement that the Convention is applicable, to establish the applicable time limit for delivery and to make declarations of value or special interest in delivery. The absence of the statement on the applicability of the Convention can lead to unlimited liability for the carrier. The absence of the other matters referred to above may be fatal to any claim made by a claimant, in particular if it is not made against the contracting carrier but against a subcontractor or "successive CMR carrier". Finally, subcontractors or "successive carriers" only become obligated under the Convention if they have taken

over both the goods and a physical CMR note (art. 34). The CEFACT survey points out that some courts have been very strict in their interpretation of this provision so as to bar certain claims under CMR terms against a subcontractor who was not handed over the CMR note (art. 34.).

"*b. The consignment note and disposal of the goods*

"92. Unlike other transport documents, such as the maritime bill of lading, the consignment note is not a document of title to the goods in transit. Nevertheless, possession of the consignment note has some significant consequences with regard to the right of disposal of the goods, as provided in article 12 of the Convention. For instance, while the sender has the right to dispose of the goods in transit (para. 1), such right ceases to exist, inter alia, "when the second copy of the consignment note is handed to the consignee", from which time onwards "the carrier shall obey the orders of the consignee".

"93. Furthermore, pursuant to article 12, paragraph 5, in order to exercise that right, the sender or, as appropriate, the consignee must produce the first copy of the consignment note on which the new instructions to the carrier have been entered. The production of the consignment note has important consequences for the liability regime of the carrier, since paragraph 7 of the same article provides that "a carrier who has not carried out the instructions given under the conditions provided for in this article, or who has carried them out without requiring the first copy of the consignment note to be produced, shall be liable to the person entitled to make a claim for any loss or damage caused thereby".

"94. Replacing paper-based consignment notes with data messages might conceivably be simpler than the development of purely electronic substitutes to documents of title. Nevertheless, an appropriate legal framework would seem to require more than simply recognizing the validity of data messages as substitutes for traditional consignment notes. Authentication methods and conditions for functional equivalence of data messages to "original" consignment notes would also need to be considered.

"*(ii) Provisions that contemplate notices or declarations that may be exchanged by the parties*

"95. Possible difficulties in the use of electronic communications may result from various provisions of the Convention that require certain notices to be given by the parties under specified circumstances. Article 20, paragraph 2, for example, allows the person entitled to receive compensation in case of failed delivery of the goods to "request in writing that he shall be notified immediately should the goods be recovered in the course of the year following the payment of compensation". In that case, the person "shall be given a written acknowledgement of such request".

"96. Other writing requirements relate to reservations providing for compensation payment for delay in delivery of goods (art. 30, para. 3); notices of claims and their effect on the running of the limitation period; and the carrier's notice of rejection of claims (in both cases, art. 32, para. 2).

"97. The possible obstacles to electronic commerce in those provisions are essentially of the same nature as in connection with similar provisions in the

Convention on the Limitation Period in the International Sale of Goods (see paras. 5-20 above[4]).”

B. Specific comments on the proposed additional protocol to the CMR Convention

7. In the view of the UNCITRAL secretariat, the negotiation of an additional protocol to the CMR Convention concerning the “Electronic Consignment Note” provides a good framework for addressing the problems that have been identified earlier. However, a number of issues may still require further consideration, as indicated below.

8. Some of our comments are intended to ensure the greatest possible consistency between the Draft Protocol and the UNCITRAL Model Law on Electronic Commerce, which is the most widely followed model for legislation in this area, having already had a significant impact on national legislation,[5] uniform acts intended for adoption by sub-sovereign jurisdictions[6] and legislation passed by non-sovereign jurisdictions enjoying legislative autonomy.[7] Other comments are more specifically concerned with the particular context of the Draft Protocol.

(1) Terminology

9. The Draft Protocol refers to “electronic registration and treatment of data”, but does not define what is meant by “electronic”. It should be noted, however, that the word “electronic” technically refers to only one of the various methods and techniques that may be used for paperless generation, transmission and storage of information. For example, data may be recorded on a magnetic stripe or an optical disk, which in an of themselves do not rely on the use of electricity, even if the information may only become accessible through the use of an “electronic” device. Therefore, if read narrowly, the references to “electronic” in the Draft Protocol would not cover various methods and techniques commonly used.

10. In order to ensure the technological neutrality of the instrument, we suggest that the Draft Protocol should use a general concept such as “electronic communication” or “data message”, which could be broadly defined, following the widely adopted definition in article 2, subparagraph (a) of the UNCITRAL Model Law on Electronic Commerce, as “information generated, sent, received or stored by electronic, magnetic, optical or similar means including, but not limited to, electronic data interchange (EDI), electronic mail, telegram, telex or telecopy.”

11. Article 2, subparagraph 2 (c) of the Draft Protocol refers to the “authentication” of the electronic consignment note in connection with the signature requirement contemplated in article 5 of the CMR Convention. In its work on electronic signatures, UNCITRAL has refrained from using the concept of “authentication” for a number of reasons:

(a) In some legal systems “authentication” and its cognate terms is a function attributed by law to persons exercising certain statutory powers (e.g. a court or a notary public) and may not be automatically inferred from the existence of a signature;

(b) The notion of “authenticity” of documents and records is often used in connection with its “originality”, a quality that is not necessarily ensured by existence of a signature;

(c) While some electronic signature techniques may go a long way to ensure the integrity (and thus the “authenticity”) of an electronic document or record, not all of them may serve this function.

12. Accordingly, in the context of the Draft Protocol, the notion of “authentication” may lead to requiring that electronic signatures provide a functionality that hand-written signatures themselves do not offer. This would effectively place a higher burden on the use of electronic consignment notes, as compared to paper-based consignment notes, and may in practice discourage, rather than promote, the use of electronic consignment notes. Therefore, we suggest that the Draft Protocol refer simply to the notion of “electronic signature”, which the UNCITRAL Model law on Electronic Signatures defines as follows:

> " 'Electronic signature' means data in electronic form in, affixed to or logically associated with, a data message, which may be used to identify the signatory in relation to the data message and to indicate the signatory's approval of the information contained in the data message."

(2) Scope of the Draft Protocol

13. We note that the Draft Protocol is exclusively concerned with recognizing an electronic consignment note. However, as indicated earlier (see paras. 95-97 of the quoted matter in para. 6 above), the CMR Convention currently contemplates a number of other communications and notices to be made "in writing", which may be an obstacle to the use of electronic communications.

14. The ECE Working Party may wish therefore to consider expanding the scope of the Draft Protocol so as to enable the parties to the contract of carriage to exchange other communications in electronic form as well.

15. The criteria for ensuring functional equivalence between electronic communications and "written" paper documents have been defined in article 6(1) of the UNCITRAL Model Law on Electronic Commerce as follows: "Where the law requires information to be in writing, that requirement is met by a data message if the information contained therein is accessible so as to be usable for subsequent reference."

16. We strongly recommend that the ECE Working Party consider introducing a general enabling provision to the effect that any statement, declaration, demand, notice or request that the parties are required to make or choose to make in connection with the formation or performance of a contract of carriage of goods by road under the CMR Convention may be made by electronic communications if the information contained therein is accessible so as to be usable for subsequent reference.

(3) Comments on Article 2 of the Draft Protocol

17. This provision contains all the substantive rules on electronic consignments. Given its complexity, our comments will be divided by paragraph.

(a) Paragraph 1, chapeau

18. This paragraph reads as follows:

> "Subject to the provisions of this Protocol, the consignment note referred to in article 5 of the Convention may be made out by any procedure used for the electronic registration and treatment of data."

19. This provision seems to imply that only a single electronic record could fulfil the functions of a paper consignment note. Of course it is for the ECE Working party to consider whether, as a matter of policy, such requirement should be made. In practice, however, there may be various ways for recording and transmitting the information that is typically contained in a paper consignment note. While some systems may be structured on the basis of a single electronic record that is also transmitted to or stored as such in a device that accompanies the cargo, other systems may be structured on the basis of central databases or registry where information concerning various shipments from a particular carrier is recorded and from which the information may be retrieved, but the information may not necessarily be recorded in and be displayed as part of a discrete "electronic consignment note" mirroring the paper consignment note. In other words, there may be several separately recorded "data messages" to replace a single paper consignment note.

20. UNCITRAL Working Group III (Transport Law), which is currently considering electronic equivalents of maritime transport documents, has acknowledged that in its work by defining

"electronic transport record" as "information in one or more messages issued by electronic communication pursuant to a contract of carriage by a carrier or a performing party" that "evidences the carrier's or a performing party's receipt of goods under a contract of carriage", or "evidences or contains a contract of carriage". This includes "information logically associated with the electronic transport record by attachments or otherwise linked to the electronic transport record contemporaneously with or subsequent to its issue by the carrier or a performing party, so as to become part of the electronic transport record." [8]

21. The general approach to the use of electronic communications is reflected in article 6 of the draft instrument on the carriage of goods by sea currently being considered at UNCITRAL, which provides as follows:

> "Subject to the requirements set out in this Convention,
>
> "(a) anything that is to be in or on a transport document in pursuance of this Convention may be recorded or communicated by using electronic communications instead of by means of the transport document, provided the issuance and subsequent use of an electronic transport record is with the express or implied consent of the carrier and the shipper; and
>
> "(b) the issuance, control, or transfer of an electronic transport record shall have the same effect as the issuance, possession, or transfer of a transport document."

22. The ECE Working Party may wish to consider taking a similar approach in the context of the CMR Convention.

(b) Paragraph 1, second part

23. The second part of this paragraph reads as follows:

> "Such a consignment note, whether or not in coded form, shall be considered to be equivalent to the consignment note referred to in article 5 of the Convention and shall therefore have the same evidential value and exercise the same effects as that consignment note if, concurrently:
>
> "(a) It meets the requirements and fulfils the functions prescribed by the Convention;
>
> "(b) The data recorded in it:
>
> "(i) are stored, archived and ready for use at any time and as long as may be necessary to comply with the Convention and the national legislation applicable as a result of its institution,
>
> "(ii) may be transformed into legible written symbols or made otherwise accessible to any person entitled to access them, even if he does not have adequate technical equipment;
>
> "(c) It is authenticated by the parties to the contract of carriage."

"whether or not in coded form"

24. The *chapeau* of this provision refers to an electronic consignment note "whether or not in coded form". It is not clear to us what is meant by "coded" in this context, but we assume that the draft provisions refers to encryption of the data contained in the electronic consignment note. We wonder

whether this reference is necessary or even desirable. If "coded" is understood in a plain meaning, the reference would seem to be superfluous for the subject matter because data messages are invariably converted into a computer-readable language (and thus "coded") at one or the other stage of the generation, transmission or storage process. If, however, the reference concerns encryption of data, we would suggest its deletion in view of the fact that encryption, or cryptography, is a particular technique used for deliberately rendering information into seemingly unintelligible form and back into the original form. There are several public policy concerns in connection with the use of cryptography, which in many countries is subject to regulatory controls. Where cryptography is expressly admitted in connection with legally relevant documents and records – such as in legislated digital signature schemes – the underlying assumption is the party to whom the information is intended to be displayed must have access to the device or data capable of decrypting the information. For these reasons, we suggest that the phrase "whether or not in coded form" be deleted.

"meets the requirements and fulfils the functions prescribed by the Convention"

25. Subparagraph (a) provides that the electronic consignment note referred to in article 5 of the Convention if it "meets the requirements" and "fulfils the functions" prescribed by the Convention. It is not clear to us which requirements and functions are meant by the provision. It would seem to us, however, that at least three functions would be meant:

(a) The documentary function. This is the function of providing a record of the contract of carriage and its particular, including the description of the goods being carried;

(b) The evidentiary function. In addition to the function (a), under this function a consignment note must be capable of providing a record admissible in court to prove the content of the contract of carriage. This means not only a "written" contract, but also one that can be produced in its "original" or equivalent form; and

(c) The legitimating function. This function serves essentially the purpose of identifying the party who or on whose behalf certain action is taken in respect of the goods carried under a consignment note.

26. The conditions under which electronic communications can fulfill these functions may be set forth in legislation or be left for the parties to agree. The first approach was taken by the UNCITRAL Model Law on Electronic Commerce, which establishes conditions fort the functional equivalence between electronic communications and "writing", "signature" and "original" requirements. These criteria have been invariably reflected in all domestic enactments of the UNCITRAL Model Law on Electronic Commerce (see para. 8 above and notes 5-7). A good basis for expressing these criteria in the context of an international convention can be found in article 9 of the Draft Convention on the Use of Electronic Communications in International Contracts, which has recently been approved by UNCITRAL.[9]

27. Another alternative might be for the Protocol to leave it for the parties to the contract of carriage to establish the procedures for the issuance of an electronic consignment note. This may be wise approach, as it would not be feasible or desirable, in view of the fast developments in information and communication technology, to identify the procedures in a statutory text. Nevertheless, the ECE Working Party may wish to consider setting out the key elements that need to be provided in the relevant procedures. In the context of maritime transport documents, UNCITRAL Working Group III (Transport law) is currently considering the following provisions:

"Article 9. Procedures for use of negotiable electronic transport records

"1. The use of a negotiable electronic transport record shall be subject to procedures which provide for:

"(a) the method to effect the issuance and the transfer of that record to an intended holder;

"(b) an assurance that the negotiable electronic transport record retains its integrity;

"(c) the manner in which the holder is able to demonstrate that it is the holder; and

"(d) the way in which confirmation is given that delivery to the consignee has been effected; or that, pursuant to articles 7(2) or 52(a)(ii),[10] the negotiable electronic transport record has ceased to have any effect or validity.

"2. The procedures in paragraph 1 must be referred to in the contract particulars and be readily ascertainable."

28. With a view to ensuring consistency in the approach taken by United Nations bodies to legal issues raised by electronic commerce and to avoid conflicts what have become widely accepted legal concepts, we strongly recommend that the ECE Working Party use the provisions quoted above as a basis for its deliberations. They could be easily adapted to fit the purpose of the Draft Protocol.

"... stored, archived and ready for use at any time and as long as may be necessary"

29. This phrase in subparagraph (a)(i) seems to go beyond the need for an "original" copy of an electronic consignment note and deals in fact with its retention. The above-quoted portion of the Draft Protocol seems further to create a time requirement for the availability of electronic consignment notes in electronic form.

30. We appreciate the concern underlying this provision. Nevertheless, we see two significant difficulties in it:

(a) Discrimination of electronic consignment notes. We are aware that transport documents are routinely inspected by border control and customs officers and may need to be retained for a certain time to prove compliance with various domestic requirements. However, such requirements do not arise out of the CMR convention itself, and no retention period, directly or indirectly is establish in respect of paper consignment notes; and

(b) Technological difficulty. Retention of electronic records involves a number of rather complex problems that are inherent to the use of electronic technology. Technical standards change, technology evolves and certain devices used for storage of electronic data are not sufficiently stable.

31. To the extent that record retention requirements arise under domestic laws and not the CMR convention itself, it might be more appropriate to leave the matter entirely for domestic law, unless the States Parties to the CMR Convention would be in a position, at this point in time to formulate specific technical standards for record retention, which would seem rather unlikely.

32. Should the ECE Working Party nevertheless consider that, from a policy viewpoint, it would be desirable to introduce retention requirements for electronic consignment notes, we would recommend that the relevant provisions of the Model Law on Electronic Commerce be considered as a possible source of useful guidance. The relevant provision is its article 10, which reads as follows:

"*Article 10. Retention of data messages*

"(1) Where the law requires that certain documents, records or information be retained, that requirement is met by retaining data messages, provided that the following conditions are satisfied:

"*(a)* the information contained therein is accessible so as to be usable for subsequent reference; and

"*(b)* the data message is retained in the format in which it was generated, sent or received, or in a format which can be demonstrated to represent accurately the information generated, sent or received; and

"*(c)* such information, if any, is retained as enables the identification of the origin and destination of a data message and the date and time when it was sent or received.

"(2) An obligation to retain documents, records or information in accordance with paragraph (1) does not extend to any information the sole purpose of which is to enable the message to be sent or received.

"(3) A person may satisfy the requirement referred to in paragraph (1) by using the services of any other person, provided that the conditions set forth in subparagraphs *(a)*, *(b)* and *(c)* of paragraph (1) are met."

33. Besides shortening the text to fit the context of the Draft Protocol, subparagraph (1)(a), which restates the functional equivalence requirement between data messages and paper writings could be deleted, as it would be already contained in a provision to be formulated along the lines of the quoted material in paragraph 6 above.

"transformed into legible written symbols or made otherwise accessible"

34. This portion of the text seems to set out the criteria for the equivalence between the electronic consignment note and paper writings. For purposes of consistency with the UNCITRAL Model Law, we suggest that the criteria for functional equivalence of article 6 of the UNCITRAL Model Law on Electronic Commerce (i.e. that the information must be "accessible so as to be usable for subsequent reference" should be used instead.

"even if he does not have adequate technical equipment"

35. It is not clear to us what is meant by this phrase. We assume the intended meaning is to ensure that the use of electronic consignment notes would not depend on the use of a particular brand of software or hardware. This may be a laudable objective. However, in practice "adequate" technical equipment would always be required. For example, if the electronic consignment note is issued as an electronic mail message, persons who want to access it would need to have electronic mail software and the supporting computer hardware. By the same token, if the electronic consignment note is recorded on a magnetic stripe card or on a chip card, the persons interested in retrieving it would need a device equipped with magnetic or chip card reader, as appropriate. Therefore, we suggest that this qualification be deleted.

(c) Paragraph 2

36. This paragraph reads as follows:

"2. The equivalence referred to in paragraph 1 above shall be considered to have been obtained:

"(a) Once the goal of a requirement or a duty demanded by the Convention is achieved, even if the procedures used differ from those mentioned in the Convention;

"(b) If the data referred to in paragraph 1 (b) above are available and can be read and, in accordance with the Convention, be supplemented or amended:

"(i) in transit, particularly, but not exclusively, on board the road vehicle, or

"(ii) by the Contracting Parties, locally or remotely, or

"(iii) by a third party, locally or remotely, if the carrier has made that party responsible for the electronic registration and treatment of the consignment notes to which this Protocol refers;

"(c) If the authentication of the consignment notes referred to in article 5 of the Convention, is effected, in accordance with the choice of the carrier and the sender, by appending:

"(i) their signatures, as agreed both with regard to the persons authorized to sign and with regard to the form of the signatures (printed signature, signature using an electronic pen, uncertified electronic signature, electronic signature certified by a third party, etc.), or

"(ii) agreed electronic stamps, replacing the signatures of the carrier and the sender, in accordance with the Convention."

"once the goal of a requirement or a duty demanded by the Convention is achieved"

37. This phrase is subparagraph 2(a) seems to repeat the subparagraph (a) of the second part of paragraph 1 (i.e. "it meets the requirements and fulfils the functions prescribed by the Convention") and might therefore be deleted.

"even if the procedures used differ from those mentioned in the Convention"

38. It is not clear what is meant by this phrase, as we have not been able to identify in the CMR convention any "procedures" for the issuance of the consignment note. To some extent it should be obvious that the "procedure" for issuing a transport document in electronic form differs from the procedure for preparing a paper document. If however what is meant is a non-discrimination clause to the effect that a consignment note should not be denied legal validity solely on the grounds that it is in electronic form, the latter formulation might be used instead.

"are available and can be read"

39. This phrase seems to repeat in substance the requirements of subparagraph (b) (i) (ie.e. "stored, archived and ready for use") and (ii) of the second part of paragraph 1 ("may be transformed into legible written symbols or made otherwise accessible to any person entitled to access them "). This phrase may therefore be deleted.

"and can be… supplemented or amended"

40. We are not sure what is meant by "supplements" or "amendments" to the consignment note "in accordance with" the CMR Convention, as we have not identified any provisions on this matter in the Convention. Furthermore, we point out to the possible problems that may be created by such a provision, in particular as the current Draft Protocol does not set out the requirements for the equivalence between electronic records and paper originals. "Supplements" or "amendments" of paper documents are easily identifiable as such, because they are either in addition to the existing original, or because the modification in the original is easily traceable. Quite often, when a "supplement" or "amendment" to a paper document is made in such a way so as to not be ascertainable, this is the result of a fraudulent intent.

41. It is however in the nature of electronic records that, unless certain procedures are used (for example, encryption with digital signatures) changes may not be apparent or immediately ascertainable. Thus, a general authorization for electronic consignment notes to be always capable of

being supplemented or amended, without requirements for establishing what is the "original" record may inadvertently erode the evidentiary function of the consignment note, as it would not be possible to establish its original content.

"authentication", "signature" "electronic stamps"

42. For the reasons set out above, we would suggest that the word authentication should not be used. Furthermore, we would suggest replacing this provision by a simple requirement that electronic consignment notes should contain the electronic signature of the issuer, coupled with an appropriate definition of "electronic signature". We would caution against inserting examples of electronic signatures in an operative provision, as such a list by nature cannot be exhaustive (the current list, for example, does not refer to biometrics, digital signatures, pin numbers and various other "authentication" methods) and might lead to misconstruction of the provision. If such a list is found to be desirable for illustration purposes, we suggest that the list should be placed in the definition of electronic signature.

(d) Paragraphs 3 to 5

43. These paragraphs read as follows:

> "3. The sender and the carrier making use of the consignment notes referred to in this Protocol shall agree on the procedures and their implementation in order to comply with the requirements of this Protocol and the Convention.
>
> "4. The carrier shall in any case hand over to the sender, at the latter's request, a receipt for the goods and all information necessary for identifying the shipment and for access to the consignment notes to which this Protocol refers.
>
> "5. The documents referred to in article 6, paragraph 2 (g) and article 11 of the Convention may be furnished by the sender to the carrier in the form of an electronic data recording, if the documents exist in this form, if the parties have agreed to procedures enabling a link to be established between these documents and the consignment note to which this Protocol refers and if the documents comply with the conditions set out in paragraph 1 (b) and in paragraph 2 (b) of this article."

44. The ECE Working Party may wish to refer in the Draft Protocol the key elements that need to be provided in the relevant procedures (see our comments and suggestions in para. 27 above).

45. We have no further comments on these provisions, beyond the comments we made earlier on the terminology of the instrument and the definition of electronic consignment note.

Conclusion

46. The secretariat of UNCITRAL commends the efforts under way within the ECE Working Party to facilitate the use of electronic communications in connection with the carriage of goods by road and confirms its readiness to contribute further to the formulation of appropriate solutions in that respect.

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[1] The current version of the draft Convention, as approved by UNCITRAL, will appear in Annex I to the report of UNCITRAL on the work of its 38th session (A/60/17), and will be available at the website of UNCITRAL (www.uncitral.org/uncitral/en/commission/sessions.html).

[2] The text of the CEFACT recommendation to UNCITRAL is contained in document TRADE/CEFACT/1999/CRP.7; its adoption by CEFACT is stated in the report of CEFACT on the work of its fiftieth session (TRADE/CEFACT/1999/19,

para. 60).

[3] It covered all multilateral treaties registered with the Secretary-General of the United Nations that are listed under chapters X (International trade and development), XI (Transport and communications), XXI (Law of the sea), and XXII (Commercial arbitration) of the "Status of Multilateral Treaties deposited with the Secretary-General".

[4] N.B.: paras. 5-20 of A/CN.9/WG.IV/WP.94 analyzed a number of possible difficulties for the use of electronic communications under the Convention on the Limitation Period in the International Sale of Goods (New York, 14 June 1974; United Nations, *Treaty Series*, vol. 1511, No. 26119, p. 1), which was used as a paradigm for the analysis of similar issues under other instruments. The difficulties identified were essentially the following: (a) various provisions of the Convention attribute certain legal effects to notices that may be exchanged or declarations that may be made by the parties, but the Convention itself is silent as to whether such declarations or notices may be made by means of electronic communication. Neither does it specify when such declarations or notices are deemed to have been made or offer criteria that allow for such a determination in connection with electronic communications; (b) various provisions in the Convention refer to communications that need to be made "in writing". However, the definition of "writing" in article 1, paragraph 3 (g), of that Convention, which includes "telegram and telex", might not prima facie include electronic communications; (c) certain provisions refer to "time" and "place" of contract "formation", notions which might require further clarification in an electronic environment; and lastly (d) provisions that refer to or imply the existence of a valid undertaking or agreement between the parties, but do not provide for its form, which is implicitly left for the law applicable to the agreement. The Secretariat's suggestion as regards those issues was that they could be addressed in the context of UNCITRAL's work on an international instrument dealing with some issues of electronic contracting, which eventually became the draft Convention on the Use of Electronic Communications in International Trade (see A/60/17, Annex I).

[5] As of August 2005, legislation implementing provisions of the Model Law has been adopted in (at least) the following countries: Australia (*Electronic Transactions Act 1999*); China (*Electronic Singatures Law 2004)*; Colombia (*Ley Número 527 de 1999: "Ley de comercio electrónico"*); Dominican Republic (*Ley n^{o} 126-02, de 4 de septiembre del 2002*); Ecuador (*Ley de comercio electrónico, firmas electrónicas y mensajes de datos"* of 2002); France (*Loi n^{o} 2000-230 du 13 mars 2000 portant adaptation du droit de la preuve aux technologies de l'information et relative à la signature électronique*); India (*Information Technology Act 2000*); Ireland (*Electronic Commerce Act 2000*); Jordan (*Electronic Transactions Law (No.85) of 2001*); Mauritius (*Electronic Transactions Acts 2000*), Mexico (*Decreto por el que se reforman y adicionan diversas disposiciones del código civil para el distrito federal*, of 26 April 2000); New Zealand (*Electronic Transactions Act 2002*); Pakistan (*Electronic Transactions Ordinance 2002*); Panama (*Ley 43 de firma digital de Panamá, de 31 de julio de 2001*); the Philippines (*Electronic Commerce Act 2000*); Republic of Korea (*Framework Law on Electronic Commerce 1999*); Singapore (*Electronic Transactions Act 1998*); Slovenia (*Zakonom o elektronskem poslovanju in elektronskem podpisu (Electronic Commerce and Electronic Signature Act) 2000*); South Africa (*Electronic Communications and Transactions Act 2002*); Thailand (*Electronic Transactions Act 2002*); and Venezuela (*Decreto n^{o} 1024 de 10 de febrero de 2001 - Ley sobre mensajes de datos y firmas electrónicas"*).

[6] In the United States, the National Conference of Commissioners on Uniform State Law (NCCUSL) used the Model Law as a basis for the preparation of the *Uniform Electronic Transactions Act* (UETA), which was adopted by the NCCUSL at its 108th annual conference (Denver, Colorado, 23-30 July 1999) and has since been enacted by the (44) States of Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming and the District of Columbia, with other States likely to adopt implementing legislation in the near future, including the State of Illinois, which had already enacted the UNCITRAL Model Law through the *Electronic Commerce Security Act 1998*.. A similar exercise has been conducted in Canada, where the Uniform Law Conference of Canada adopted in 1999 the *Uniform Electronic Commerce Act* (UECA), which was since been enacted in a number of Provinces and Territories, including Alberta, British Columbia, Manitoba, New Brunswick, New Foundland and Labrador, Nova Scotia, Prince Edward Island, Ontario, Saskatchewan and Yukon. The Province of Quebec enacted specific legislation (*Act to Establish a Legal Framework for Information Technology 2001*) which, although being broader in scope and drafted very differently, achieves many objectives of UECA and is generally consistent with the UNCITRAL Model Law..

[7] For example, the Bailiwick of Guernsey (*Electronic Transactions (Guernsey) Law 2000),* the Bailiwick of Jersey (*Electronic Communications (Jersey) Law 2000)* and the Isle of Man (*Electronic Transactions Act 2000)*, all Dependencies of the British Crown; the UK overseas territories of Bermuda (*Electronic Transactions Act 1999*), Cayman Islands (*The Electronic Transactions Law, 200*) and Turks and Caicos (*Electronic Transactions Ordinance 2000*); and the Hong Kong Special Administrative Region of China (*Electronic Transactions Ordinance 2000*).

[8] See "Transport Law: Preparation of a draft instrument on the carriage of goods [wholly or partly] [by sea]-

Proposed revised provisions on electronic commerce", Note by the Secretariat, 24 March 2005 (A/CN.9/WG.III/WP.47, available at www.uncitral.org/uncitral/en/commission/working_groups/3Transport.html)

[9] The Draft Convention was approved by UNCITRAL at its thirty-eighth session (Vienna, 4-15 July 2005). The final drat will appear in Annex I to the report of UNCITRAL on the work of that session (A/60/17), which is expected to be released in September 2005.

[10] Those articles in the draft instrument on the carriage of goods by sea relate to the cancellation of an electronic transport document after the parties have agreed to switch back to paper documents.