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Report of Working Group IV (Electronic Commerce) on the work of its forty-sixth session (Vienna, 29 October-2 November 2012)

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I. Introduction

1. At its forty-second session, in 2009, the Commission requested the Secretariat to prepare a study on electronic transferable records in the light of proposals received at that session (A/CN.9/681 and Add.1, and A/CN.9/682).[1]

2. At its forty-third session, in 2010, the Commission had before it additional information on the use of electronic communications for the transfer of rights in goods, with particular regard to the use of registries for the creation and transfer of rights (A/CN.9/692, paras. 12-47). At that session, the Commission requested the Secretariat to convene a colloquium on relevant topics, namely, electronic transferable records, identity management, electronic commerce conducted with mobile devices and electronic single window facilities.[2]

3. At its forty-fourth session, in 2011, the Commission had before it a note by the Secretariat (A/CN.9/728 and Add.1) summarizing the discussions at the colloquium on electronic commerce (New York, 14-16 February 2011).[3] After discussion, the Commission mandated the Working Group to undertake work in the field of electronic transferable records.[4] It was recalled that such work would be beneficial not only for the generic promotion of electronic communications in international trade, but also to address some specific issues such as assisting in the implementation of the Rotterdam Rules.[5] In addition, the Commission agreed that work regarding electronic transferable records might include certain aspects of other topics such as identity management, use of mobile devices in electronic commerce and electronic single window facilities.[6]

4. At its forty-fifth session (Vienna, 10-14 October 2011), the Working Group began its work on various legal issues relating to the use of electronic transferable records, including possible methodology for future work by the Working Group (A/CN.9/737, paras. 14-88). It also considered the work of other international organizations on that subject (A/CN.9/737, paras. 89-91).

5. At its forty-fifth session, in 2012, the Commission expressed its appreciation to the Working Group for the progress made and commended the Secretariat for its work.[7] There was general support for the Working Group to continue its work on electronic transferable records and the need for an international regime to facilitate the cross-border use of electronic transferable records was emphasized.[8] In that context, the desirability of identifying and focusing on specific types of or specific issues related to electronic transferable records was mentioned.[9] After discussion, the Commission reaffirmed the mandate of the Working Group relating to electronic

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[1] *Official Records of the General Assembly, Sixty-fourth Session, Supplement No. 17* (A/64/17), para. 343.

[2] Ibid., *Sixty-fifth Session, Supplement No. 17* (A/65/17), para. 250.

[3] Information about the colloquium is available at the date of this document from www.uncitral.org/uncitral/en/commission/colloquia/electronic-commerce-2010.html.

[4] *Official Records of the General Assembly, Sixty-sixth Session, Supplement No. 17* (A/66/17), para. 238.

[5] Ibid., para. 235.

[6] Ibid.

[7] Ibid., *Sixty-seventh Session, Supplement No. 17* (A/67/17), para. 82.

[8] Ibid., para. 83.

[9] Ibid.

transferable records and requested the Secretariat to continue reporting on relevant developments relating to electronic commerce.[10]

II. Organization of the session

6. The Working Group, composed of all States members of the Commission, held its forty-sixth session in Vienna from 29 October to 2 November 2012. The session was attended by representatives of the following States members of the Working Group: Algeria, Austria, Bolivia (Plurinational State of), Brazil, Canada, Chile, China, Colombia, Czech Republic, El Salvador, France, Germany, Honduras, Israel, Italy, Japan, Kenya, Malaysia, Malta, Mexico, Nigeria, Pakistan, Republic of Korea, Russian Federation, Singapore, Spain, Thailand, Turkey, Ukraine, United States of America and Venezuela (Bolivarian Republic of).

7. The session was also attended by observers from the following States: Belarus, Belgium, Cyprus, Dominican Republic, Ecuador, Hungary, Indonesia, Iraq, Poland, Qatar, Republic of Moldova and Viet Nam.

8. The session was also attended by observers from the European Union.

9. The session was also attended by observers from the following international organizations:

(a) *Intergovernmental organizations*: International Institute for the Unification of Private Law (Unidroit) and the World Customs Organization (WCO);

(b) *International non-governmental organizations*: Council of the Interparliamentary Assembly of Member Nations of the Commonwealth of Independent States, European Law Institute, European Multi-Channel and Online Trade Association, Forum for International Conciliation & Arbitration, Fédération Internationale des Associations de Transitaires et Assimilés, Institute of Law and Technology (Masaryk University), International Air Transport Association and the New York State Bar Association.

10. The Working Group elected the following officers:

Chairman: Sr. Agustin MADRID PARRA (Spain)

Rapporteur: Ms. Kachida MEETORTHARN (Thailand)

11. The Working Group had before it the following documents: (a) annotated provisional agenda (A/CN.9/WG.IV/WP.117); (b) a note by the Secretariat on legal issues relating to the use of electronic transferable records (A/CN.9/WG.IV/WP.118 and Add.1); (c) legal issues relating to the use of electronic transferable records — Proposal by the Governments of Colombia, Spain and the United States (A/CN.9/WG.IV/WP.119); and (d) a paper submitted by the Identity Management Legal Task Force of the American Bar Association (ABA) on identity management (A/CN.9/WG.IV/WP.120).

[10] Ibid., para. 90.

12. The Working Group adopted the following agenda:

1. Opening of the session.
2. Election of officers.
3. Adoption of the agenda.
4. Consideration of legal issues relating to the use of electronic transferable records.
5. Technical assistance and coordination.
6. Other business.
7. Adoption of the report.

III. Deliberations and decisions

13. The Working Group engaged in discussions on the legal issues relating to the use of electronic transferable records on the basis of document A/CN.9/WG.IV/WP.118 and Add.1. The deliberations and decisions of the Working Group on those topics are reflected in chapter IV below.

IV. Legal issues relating to the use of electronic transferable records

14. At the outset, the Working Group was briefed about the results of consultations undertaken in States with respect to electronic transferable records. While consultations in a couple of States showed limited or no industry interest or need for the use of electronic transferable records in the finance sector, it was noted that consultations in a significant number of other States received favourable responses from several sectors.

15. A suggestion was made that work on electronic transferable records should be solely based on actual industry needs and resolve identified problems, if any. In response, it was noted that actual industry needs had been identified. It was further highlighted that enabling the use of electronic transferable records would bring clear benefits to the industries concerned.

16. In that respect, it was noted that, by facilitating the use of electronic transferable records, transactions costs could decrease, while efficiency and security of commercial transactions could increase. References were made to the benefits arising from the use of electronic promissory notes and electronic warehouse receipts in existing national systems. The prevailing cross-border dimension in the use of electronic bills of lading, which called for harmonized laws enabling their use which UNCITRAL was uniquely placed to develop and which could also entail the use of electronic bills of exchange as trade documents, was highlighted. Finally, it was pointed out that detailed rules could usefully complement the provisions of the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (the “Rotterdam Rules”) on negotiable electronic transport records.

17. The Working Group agreed that a considerable amount of information collected during consultations confirmed the desirability of continuing work on electronic transferable records and the potential usefulness of guidance in that field.

A. Scope of Work

1. Electronic transferable records

18. As to the scope of work, while a suggestion was made that it would be desirable for the Working Group to focus on specific types of or specific issues related to electronic transferable records, it was widely felt that the Working Group should develop generic rules based on a functional approach and that such generic rules should be broad enough to encompass various types of electronic transferable records, including those relating to goods and money. Significant past achievements in developing generic rules based on a functional approach were noted and therefore, it was suggested that a similar approach be taken with regard to electronic transferable records. It was further proposed that specific rules pertaining to certain types of electronic transferable records could be developed after the preparation of such generic rules, if necessary.

19. It was suggested that the general description of transferable documents and instruments excluded from the scope of application of the United Nations Convention on the Use of Electronic Communications in International Contracts (the "Electronic Communications Convention") under article 2, paragraph 2, could provide a starting point for discussion as it offered a general yet comprehensive description of electronic transferable records.

20. It was restated that the Working Group should not deal with matters governed by underlying substantive law. In addition, it was emphasized that terminology should be carefully chosen so as to accommodate the substantive laws of all legal traditions.

21. Thereafter, the Working Group discussed the distinction between transferability and negotiability. It was agreed that negotiability related to the underlying rights of the holder of the instrument under substantive law and that the discussion therefore should focus on transferability.

22. After discussion, the Working Group adopted the working assumption that electronic transferable records should refer to the electronic equivalent of any transferable document or instrument "that entitles the bearer or beneficiary to claim the delivery of goods or the payment of a sum of money" (see article 2, paragraph 2, of the Electronic Communications Convention). It was further clarified that electronic transferable records should not include electronic equivalents of securities, such as shares and bonds, nor electronic means of payment.

2. Management of electronic transferable records

23. With respect to the existence of different models for the management of electronic transferable records (registry-based, token-based or other systems), it was explained that neutrality should be respected not only with regard to the technology but also to the system chosen.

B. Legal issues with respect to electronic transferable records

1. Creation and release of electronic transferable records

24. The importance of defining a functional equivalent of the notion of possession of paper-based documents in order to identify the party entitled to the performance embodied in the electronic transferable record was stressed. It was suggested that functional equivalence could be achieved through the notion of control of the electronic transferable record. It was noted that the attribution of control was inherent in the creation of electronic transferable records. It was stressed that the notion of control was to be formulated in a technology neutral manner.

25. It was further suggested that, to establish control over an electronic transferable record, the following requirements might be applied to technology: authenticity of the record and of its signatures; originality and integrity of the record, at least for the period of time required by law; and ability to identify the holder, taking into consideration the desirability not to disclose its identity in certain circumstances. It was noted that chapter 10 of the Rotterdam Rules might provide useful guidance in the discussion of the notion of control.

26. It was explained that business practice evidenced the use of paper-based documents issued to bearer. It was added that rules on electronic transferable records should enable such use, allowing anonymity to the extent permitted by technology, for instance, through the use of pseudonyms. In that respect, it was also said that the parties might not necessarily be identified in the electronic transferable record management system, but could remain identifiable depending on the features of that system or the technology used. However, it was also noted that regulatory requirements increasingly demanded the identification of the parties involved, particularly in financial transactions.

27. It was indicated that it might be beneficial for the Working Group to consider whether it would be appropriate to distinguish between licensed and unlicensed third-party service provider, the issue of liability of third-party service provider, as well as the question of any possible liability of the issuer of the record in respect of choosing a third-party service provider. It was noted that articles 9 and 10 of the UNCITRAL Model Law on Electronic Signatures, dealing with the conduct and trustworthiness of the certification service provider, could provide useful guidance on that topic.

28. As to the creation of electronic transferable records, the Working Group considered whether its scope of work should be confined to the transposition of paper-based transferable documents to the electronic environment or should also consider novel instruments that would exist only in the electronic environment. It was pointed out that examining novel instruments would entail work on substantive law aspects, which was not within the mandate of the Working Group. In that line, it was suggested that the Working Group should focus on addressing formal requirements for the creation of electronic transferable records, some of which (for example, writing and signature) had already been addressed in previous UNCITRAL texts.

29. After discussion, it was generally agreed that the Working Group should focus on enabling the use of electronic transferable records as equivalents of existing

paper-based transferable documents. However, it was also suggested that while the Working Group should not engage in preparing substantive rules for instruments that would exist only in the electronic environment, those instruments should not be excluded from the general scope of its work on electronic transferable records.

30. As to the creation of electronic transferable records, the significance of building users' trust through a secure, effective and reliable system was highlighted.

31. The Working Group agreed that the two terms "issuance" and "release" were closely related yet distinct. It was explained that, while the term "issuance" had potential connotations under substantive law, the term "release" referred to the physical or technical step of placing the electronic transferable record under the control of its first holder. Reference was made to article 8 (b) of the Rotterdam Rules where the term "issuance" was used in connection with an electronic transport record. It was further noted that the role of a third party in releasing the record, for instance as an agent of the issuer, would need to be examined. It was explained that a registry-based system could be designed to allow the issuer to directly release the electronic transferable record. The need to distinguish between the functions of a registry and of a repository was mentioned.

32. As to the information required for the creation of electronic transferable records, it was agreed that the same information required for the creation of the paper-equivalent should be required. However, it was noted that, due to the electronic form of the record, additional technical information could be required, such as an identification number assigned to that record. In that context, it was mentioned that the need for consent to the use of electronic transferable records, explicit or implicit (as provided in article 8, paragraph 2, of the Electronic Communication Convention), would also need to be addressed. In addition, it was noted that due to the electronic nature, information additional to that available in the paper-based equivalent could be included in the record, and that parties should not be prevented from adding such information, if so agreed. It was further noted that article 5 bis of the UNCITRAL Model Law on Electronic Commerce could also be relevant in the sense that required or additional information might be incorporated by reference in the electronic transferable record.

33. It was explained that uniqueness should not be an end in itself, but rather a means to avoid multiple claims based on multiple documents entitling their holders to demand performance. Bearing that in mind, it was noted that the requirements for achieving uniqueness might change in light of technology used and other circumstances. Reference was made to article 9, paragraph 1, of the Rotterdam Rules as an example of achieving uniqueness by setting out the procedure for the use of negotiable electronic transport records.

34. However, a view was expressed that the main goal of uniqueness was to ascertain the content of the obligation contained in the electronic transferable record, while the problem of multiple claims could be prevented through the notion of control that allowed identification of the rightful holder.

35. The view was expressed that registry-based systems might be designed in a manner to provide a higher level of reliability of the uniqueness of the electronic transferable record, while token-based systems might not provide that same level of reliability based on their technical features only. In response, it was noted that equally effective token-based systems were available and other factors, such as the

number of entities having access to the electronic transferable record, might have an impact on the level of reliability of the uniqueness of the electronic transferable record.

36. Reference was made to current practices envisaging the use of multiple originals in the paper-based environment. The case of paper-based bills of lading, issued in three originals, was cited. It was asked whether the replication of such practice in the electronic environment would be technically feasible or desirable in light of the higher transmission speed and security offered by the use of electronic means. Reference was made to article 36, paragraph 2 (d), of the Rotterdam Rules, which allowed the issuance of multiple originals of negotiable transport documents but not of negotiable electronic transferable records. It was recalled that during the negotiations of the Rotterdam Rules, it was observed that needs covered in the paper-based environment through the issuance of several originals could be satisfied in the electronic environment through the issuance of one single original.

37. The Working Group agreed that future consideration of uniqueness should take into due account relevant UNCITRAL texts. It also agreed that uniqueness should aim at entitling only one holder of the electronic transferable record to performance.

38. The Working Group continued its discussion under the assumption that the notion of "control" over electronic transferable records would achieve the functional equivalence of the notion of "possession" of paper-based documents. It was explained that control was necessary to designate the holder of the record in a reliable manner.

39. It was added that the type of procedure used to achieve control was a secondary issue. Different examples of legislative provisions dealing with control were mentioned. It was noted that, while some provisions referred only to the existence of adequate procedures, other provisions set forth in more detail the requirements of those procedures. It was also mentioned that in registry-based systems, the holder of the electronic transferable record might not have actual control.

40. It was asked whether it was desirable to associate a presumption of reliability to procedures satisfying certain requirements, to be described in a technology neutral manner. In response, the need for a cautious approach to avoid favouring any system or technology was stressed.

41. After discussion, the Working Group agreed that rules on control should aim at establishing the functional equivalence of possession in the paper-based environment by effectively identifying the holder entitled to performance. It was further agreed that there should not be any specific reference to the type of system or technology to be adopted to generate such reliability.

42. It was indicated that any obligation to disclose the identity of the issuer or of the first holder would be contained in the applicable substantive law. Therefore, it was added that anonymity should be permitted to transpose existing business practices for paper-based documents in the electronic environment. At a general level, it was suggested that provisions on electronic signatures, including those prepared by UNCITRAL, would be relevant in establishing the link between electronic transferable records and concerned parties.

43. It was further said that the identification of the holder as the entity entitled to performance was distinct from the disclosure of the identity of that entity. The example was given of the use of a personal identification number (PIN) for the consignment of goods, a practice that reliably identified the party entitled to performance without necessarily disclosing its identity.

44. It was indicated that where prior identification of the party was required to access the electronic transferable records management system, the disclosure of that party's identity could be achieved based on that prior identification. On the other hand, in a system that did not require such prior identification, satisfying such disclosure requirement might demand the use of additional measures.

2. Circulation of electronic transferable records

45. In light of current business practice, it was suggested that rules should be prepared to provide for the amendment of electronic transferable records. The need for amendments to be clearly identifiable as such was stressed. It was further noted that the transfer of control over an electronic transferable record, discussed below, would generally be achieved through the amendment of that record.

46. It was suggested that the holder in control of the electronic transferable record would often be the party having the right to make such amendments. However, caution was urged in the sense that any rule on this matter should not have the effect of allowing the holder to make amendments that affect the issuer's underlying obligation without the consent of the issuer. As such, it was suggested that reference should instead be made to the party with the authority to make amendments, as determined by substantive law.

47. The need to include a requirement to inform parties affected by the amendment, when such an amendment was made, was suggested. However, it was stated that notice requirements did not necessarily exist in the paper-based environment and that it would be more appropriate to maintain the same notice requirements for electronic transferable records as set for paper-based transferable documents. Similar comments were expressed on the question of when amendments could be made to electronic transferable records.

48. As to how to give effect to amendments, it was suggested that that was a technical issue which was largely system dependent. It was indicated that rules on amendments should recognize that an electronic transferable record could be amended and let the system determine how this was put in practice.

49. After discussion, it was agreed that the rule to be prepared should acknowledge the need to address amendments and their effectiveness, while the issues of establishing which party could make such amendments and under what circumstances should be left to substantive law. In that context, it was suggested that it would be useful to have a definition of the term "amendment".

50. Thereafter, the Working Group engaged in a discussion on transfer of control. It was explained that transfer of control over an electronic transferable record should have the same effect as delivery and, when required, endorsement of a paper-based transferable document.

51. It was suggested that the elements contained in article 9, paragraph 1, of the Rotterdam Rules might provide a useful starting point for drafting rules on transfer

of control. However, it was also said that provisions contained in chapter 3 of the Rotterdam Rules, including article 9, needed further specification in order to offer the desirable level of guidance, and that rules setting forth the procedures for achieving functional equivalence to the transfer of paper-based documents were necessary to that end.

52. Other possible legislative models, such as the Uniform Commercial Code (UCC) Section 7-106 of the United States of America, were mentioned. In particular, it was suggested that the general approach taken in subsection (a) of that provision might provide general guidance.

53. With respect to third-party service providers such as registry operators, it was indicated that the obligations of those third parties could arise from the requirements of the procedures put in place to establish and transfer control, as well as from qualities of the electronic transferable records management system such as reliability and security. Therefore, it was said, additional duties or obligations for those third-party service providers should not be created in the rules.

54. It was suggested that providing a definition of control over an electronic transferable record could be useful for future deliberations. In particular, it was noted that, while typically the holder would have the right to transfer control over the electronic transferable record, a more detailed discussion of that right demanded prior consensus on the definition of control.

55. It was asked whether rules on transfer of control should allow for change in the manner of transmission to the bearer, if the record had been issued to a named party, and vice versa. It was replied that all options available for paper-based transferable documents should also be applicable to electronic transferable records.

56. A question was raised with regard to the moment in time when the transfer of control took place. In that respect, the possibility of using a rule similar to that contained in article 10 of the Electronic Communications Convention to determine the time of dispatch and receipt of electronic communications, and therefore the time of the transfer of the electronic transferable record, was mentioned.

57. It was suggested that establishing a consistent terminology, possibly through definitions, would be useful in identifying those instances relating to the identification of the legal capacity of the party (e.g., holder) as opposed to other instances relating to disclosure of its identity.

58. After discussion, the Working Group agreed that a definition of control as well as rules on the transfer of control, taking into account existing legislative models and bearing in mind technology neutrality, should be prepared for future consideration. In particular, it was noted that limitations on the number of transfers should be avoided if not applicable to paper-based documents.

59. It was said that rules on the correction of transferable documents were excessively influenced by the paper medium, and that therefore new rules, specific to input errors in the electronic environment, would be desirable. It was suggested that those rules could contemplate correction before and after the issuance of that record. In the latter case, it was added, the consent of all concerned parties might be necessary. With respect to registry-based systems, the distinction between input errors of the parties and of registry operators was highlighted.

60. It was said that the consequences of allowing for corrections of electronic transferable records might be particularly serious, given that those records were used in international trade between remote parties, and that strict parameters were required by financial institutions upon their presentation. The need to protect all involved parties, including by requiring their consent to the correction, where appropriate, was stressed.

61. The possibility of introducing a rule akin to that contained in article 14 of the Electronic Communications Convention was discussed. It was said that that article had a narrow scope but could nevertheless be useful in addressing issues specific to the use of electronic means. In particular, it was explained that that article would apply only to cases when an input error was made during the interaction between a natural person and an automated message system, and when that message system did not provide an opportunity to correct that error. Moreover, other conditions had to be fulfilled, including that the natural person had received no benefit from the relevant transaction. It was said that, in practice, that rule was unlikely to find application if the electronic transferable records management system foresaw the use of the same procedure, be it automated or manual, for all participants.

62. It was added that electronic transferable records management systems would usually allow for the treatment of input errors, and that competition among different providers of those systems would give businesses an opportunity to choose a system offering such an option. Given the desirability to avoid interfering with substantive law, it was agreed that a cautious approach should be taken when considering specific rules on the correction of electronic transferable records.

63. It was noted that existing examples of guarantees on, and pledges of, electronic transferable records were generally found in registry-based systems used in the finance sector. It was added that the need for guarantees and pledges also arose for other transferable documents. For instance, it was explained that bills of lading were often offered as a guarantee to financial institutions. In that case, it was added, a mechanism could be devised under which the guarantee would be able to override the holder in control of the record.

64. Reference was made to the UNCITRAL Legislative Guide on Secured Transactions, which provided guidance on the substantive law dealing with secured transactions involving negotiable documents and instruments.

65. The Working Group agreed that rules on guarantees and pledges of electronic transferable records should be prepared, that those rules should accommodate all types of records, and that they should be technology and system neutral.

66. It was noted that splitting and consolidation of transferable documents existed in business practice, and that a general rule providing such possibility for electronic equivalents could be particularly beneficial.

67. With respect to current practice relating to splitting and consolidation of bills of lading, it was illustrated that, in some cases, existing bills ceased to have legal effect and new bills were issued. It was added that, while the involvement of the carrier and the shipper was necessary, different practices existed with respect to requiring the consent of other parties.

68. It was suggested that requirements for and effects of splitting and consolidation of electronic transferable records should be determined by substantive law, and that related modalities should reflect current practice.

69. The Working Group agreed that, for the time being, there was no need to prepare a general rule on the involvement of the issuer of the electronic transferable record during the circulation of that record.

3. End of life cycle of electronic transferable records

70. With respect to the "presentation" of electronic transferable records for performance, it was pointed out that presentation in the electronic environment introduced significant practical challenges due to remoteness and possible lack of familiarity between the parties and the need to address issues regarding partial performance and the obligor's refusal to perform was raised.

71. The Working Group agreed that a rule should be prepared aimed at achieving the functional equivalence of physical delivery of paper-based documents. It was further agreed that such a rule should not address the legal consequences of presentation, which were matters of substantive law.

72. As regards the "conversion" of electronic transferable records, it was said that providing convertibility was critical for the wider acceptance and use of electronic transferable records for example electronic bills of lading which were used across borders, due to the different levels of readiness in various States and business communities.

73. It was noted that the legal effect of, and information contained in, the document or record to be converted should remain unchanged so as to be media-neutral. It was therefore agreed that conversion should not refer to a situation where a document or record was terminated and a new record or document was issued, but instead to where there was a mere change in the medium. It was also stressed that the document or record in its original form, once converted, should cease to have any legal effect in that original form, so as to prevent the possibility of multiple claims.

74. A suggestion was made that only conversion of paper-based documents to electronic records should be allowed, as this would generally promote the broader use of electronic means. In response, it was stated that conversion in both ways should be permitted to reflect current business practice and to allow for the use of paper-based documents by parties with limited access to information and communication technology. It was stated that the inability to convert back an electronic record to a paper-based document after its conversion into the electronic form could be an obstacle for parties when deciding to convert the paper-based document to an electronic form. Support was expressed for the more comprehensive and flexible approach.

75. A question was raised whether termination of an electronic record upon its conversion would need to be distinguished from termination of the legal effect of the record upon performance of the underlying obligation. In response, it was stated that the two instances should be treated differently, particularly because termination due to conversion did not entail the termination of the underlying obligation. It was

suggested that terminology be carefully chosen to prevent any ambiguity, for instance, by referring to "substitution" in the case of conversion.

76. It was further suggested that the following issues would need to be considered: (i) whether the document or record would need to include information about the conversion; (ii) which parties should consent to or otherwise be involved in the conversion; and (iii) whether the substituted document or record could be restored in specific circumstances such as when the substitute document or record had not been effectively created or had been lost. It was noted that substantive law seldom dealt with these issues.

77. After discussion, it was agreed that a general rule to provide for the possibility of converting paper-based documents into electronic transferable records and vice versa should be prepared taking into consideration the various aspects mentioned above.

78. With regard to "termination", it was reiterated that the terminology should be carefully chosen to avoid any confusion, particularly as some terms might imply legal consequences. It was clarified that the issue at hand did not deal with the termination of the underlying obligation, which was a matter of substantive law, but rather with the circumstances whereby the electronic transferable record would cease to have any legal effect, for instance in the case of performance by the obligor. In that context, the need to prevent further circulation of the electronic transferable record, which could result in additional claims even after performance, was stressed.

79. It was further clarified that the circumstances in which transferable documents or records would cease to have legal effect was a matter of substantive law and thus could differ according to the type of the instrument.

80. Reference was made to article 9, paragraph 1(d), of the Rotterdam Rules which referred to a mechanism for providing confirmation that delivery to the holder had been effected, or that the electronic transport record had ceased to have any effect or validity.

81. During the discussion, the following issues were raised: (i) whether partial performance by the obligor could be effected as partial termination or amendment of the record, or rather through the termination of the existing record and the issuance of a new record; and (ii) whether there was the need to replicate the functional equivalent of annotations indicating termination in a paper-based document. As to the storage of the record, it was suggested that article 10 of the Model Law on Electronic Commerce on the retention of data messages could provide a starting point for discussion.

82. After discussion, it was agreed that a general rule should be prepared to address the need to replicate, in a functionally equivalent manner, the circumstances whereby a paper-based transferable document would cease to have any legal effect.

C. Other issues with respect to electronic transferable records

1. Third-party service providers

83. The Working Group moved to consider legal issues relating to third parties providing services for the issuance and use of electronic transferable records, such as registry operators. In that context, it was indicated that repositories and providers of other services should be distinguished.

84. It was said that the inclusion of the topic in the rules to be prepared could lead to favouring a specific system, thus violating the principle of technology and system neutrality. In that respect, the provisions on certification service providers in the UNCITRAL Model Law on Electronic Signatures were mentioned. In response, it was noted that it might be possible to develop rules encompassing all third parties providing services relating to the management of electronic transferable records, without specific reference to any technology or system.

85. It was suggested that liability of third parties was a matter of substantive law or contractual agreements, and that users of existing systems were adequately protected by the insurance covering the operators of those systems. It was further said that, while it might be possible to identify some parameters that could provide guidance in establishing the trustworthiness of third-party service providers, caution should be exercised when addressing the questions of whether and what level of regulation was appropriate. It was specified that there was no need to subject third parties to a mandatory licensing system or a mandatory dispute resolution system.

86. On the other hand, it was indicated that in certain jurisdictions, especially those belonging to the civil law tradition, registries were public and subject to rules set forth in the law as well as to licensing requirements. It was suggested that that approach was the most appropriate to build trust in international trade, where parties were in remote locations and sometimes not otherwise acquainted. It was suggested that different types of registries should be developed for the various types of electronic transferable records, following the example set in the registries established by the Convention on International Interests in Mobile Equipment (“Cape Town Convention”) and protocols thereto. It was stressed that leaving the development of liability regimes for such registries entirely to the market would expose commercial operators to excessive risks.

2. Cross-border recognition of electronic transferable records

87. The importance of cross-border aspects of the legal recognition of electronic transferable records was reiterated. It was indicated that cross-border aspects were particularly prevalent in electronic transferable records used in the maritime transport industry.

88. The view was expressed that enabling the cross-border use of electronic transferable records required addressing certain aspects, such as enforcement matters, but did not call for a broader harmonization effort. Reference was made to article 12 of the UNCITRAL Model Law on Electronic Signatures as an example of a provision specifically aimed at enabling cross-border recognition.

89. In response, it was indicated that enabling the effective cross-border use of electronic transferable records demanded dealing not only with the specific aspects of the operation of those records, but also with the broader international legal framework for electronic communications.

D. Future work

90. The Working Group engaged in a preliminary discussion on the possible future outcome of its deliberations on electronic transferable records.

91. At a general level, it was indicated that the content of the rules to be prepared would guide in the choice of the appropriate form it would take. It was added that the level of legal harmonization deemed desirable would also be relevant to that choice.

92. In light of the progress made, it was suggested that a possible outcome of the work could result in a model law based on and complementing existing UNCITRAL texts. It was explained that a model law would allow for flexibility when addressing differences in national substantive laws. Some support was also expressed for the preparation of guidance texts, such as a legislative guide. The possibility of considering in the future the preparation of a more binding instrument, of a treaty nature, was also mentioned.

93. Broad support was expressed for the preparation of draft provisions for consideration at the next session of the Working Group. It was added that those provisions should be presented in the form of a model law, without prejudice to the decision on the form of its work to be made by the Working Group.

V. Technical assistance and coordination

94. The Working Group was informed of the entry into force of the Electronic Communications Convention on 1 March 2013, with the Dominican Republic, Honduras and Singapore as its States parties. It was further noted that sixteen other States have signed the Convention. Noting the significance of the Convention in facilitating the use of electronic communications in international trade, the Working Group encouraged other States to consider becoming parties to the Convention and, in that context, several States expressed their interest and informed the Working Group that domestic consultations and preparatory legislative work were underway.

95. Then the Working Group was informed of the developments undertaken in the promotion of UNCITRAL texts on electronic commerce. In particular, initiatives at the regional level were illustrated, as well as resulting legislative enactments (for further details, see A/CN.9/753, paras. 19 and 33-35). The Working Group expressed appreciation for the work undertaken by the Secretariat in the field of technical assistance and highlighted the importance of that work in furthering the mandate of UNCITRAL. The Working Group benefited from a presentation on the legal, technological and functional aspects of current initiatives relating to the use of electronic communications in the Russian Federation with a view to facilitating cross-border recognition at the international and regional levels.

96. The Working Group was then informed of the ongoing cooperation with various organizations with regard to legal issues relating to electronic single window facilities. The Working Group first took note of Resolution 68/3 adopted by the Economic and Social Commission for Asia and the Pacific (ESCAP) entitled "Enabling paperless trade and the cross-border recognition of electronic data and documents for inclusive and sustainable intraregional trade facilitation" which encouraged the adoption of available international standards, such as those contained in UNCITRAL texts, to facilitate interoperability. The Working Group also took note of the publication "Electronic Single Window Legal Issues: A Capacity-Building Guide" prepared jointly by the United Nations Network of Experts for Paperless Trade in Asia and the Pacific (UNNExT), ESCAP and the United Nations Economic Commission for Europe (UNECE). The Secretariat was requested to continue working closely with ESCAP, including through the UNCITRAL Regional Centre for Asia and the Pacific and in particular on the implementation of ESCAP Resolution 68/3, as well as with other relevant organizations.

97. The Working Group took note of a statement by the secretariat of the WCO, in which it noted the growing importance of single window facilities for trade facilitation, including for developing and least developed countries, and welcomed the contribution of UNCITRAL in establishing related legal standards. In that statement, the WCO secretariat also noted that electronic transferable records were a key component of the paperless supply chain and stressed the importance of the availability of those records to increase the quality of the data submitted to single window facilities, therefore enabling seamless electronic exchanges between private and public entities.

98. With respect to legal issues relating to identity management, the Working Group heard a summary of the working paper submitted by the Identity Management Legal Task Force of the ABA (A/CN.9/WG.IV/WP.120) which provided an overview of identity management, its potential role in electronic commerce and relevant legal issues. Particular reference was made to the adequate legal treatment of risks involved in identity management systems in relation to the liabilities of third-party service providers.

99. Thereafter, the Working Group was informed of the Secretariat's cooperation with UNECE and the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT). It was noted that the Secretariat was currently involved in two projects: (i) revision of UN/CEFACT recommendation 14 which dealt with authentication of trade documents by means other than signature; and (ii) preparation of UN/CEFACT recommendation 36 on single window interoperability, which aimed at complementing the existing UN/CEFACT recommendations 33 to 35 on that topic.

100. Finally, the Working Group was informed of a proposal made by the European Commission in June 2012 for a "Regulation of the European Parliament and of the Council on electronic identification and trust services for electronic transactions in the internal market". It was noted that the Secretariat had been involved in the consultation process to ensure a coordinated approach on that matter.

VI. Other business

101. The Working Group was informed that the forty-seventh session of the Working Group will be held in New York from 13 to 17 May 2013.