United Nations A/CN.9/863*

General Assembly

Distr.: General
20 November 2015

Original: English

United Nations Commission on International Trade Law
Forty-ninth session
New York, 27 June-15 July 2016

Report of Working Group IV (Electronic Commerce) on the work of its fifty-second session (Vienna, 9-13 November 2015)

Contents

* Reissued for technical reasons on 18 January 2016.

V.15-08239 (E) 021215 031215

I. Introduction

1. At its forty-fourth session, in 2011, the Commission mandated Working Group IV to undertake work in the field of electronic transferable records.[1] 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.[2]

2. 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).

3. At its forty-fifth session, in 2012, the Commission reaffirmed the mandate of the Working Group relating to electronic transferable records and requested the Secretariat to continue reporting on relevant developments relating to electronic commerce.[3]

4. At its forty-sixth session (Vienna, 29 October-2 November 2012), the Working Group continued its examination of the various legal issues that arose during the life cycle of electronic transferable records (A/CN.9/761, paras. 24-89). At its forty-seventh session (New York, 13-17 May 2013), the Working Group had the first opportunity to consider the draft provisions on electronic transferable records. It was reaffirmed that the draft provisions should be guided by the principles of functional equivalence and technology neutrality, and should not deal with matters governed by the underlying substantive law (A/CN.9/768, para. 14).

5. At its forty-sixth session, in 2013, the Commission reaffirmed the mandate of the Working Group and agreed that work towards developing a legislative text in the field of electronic transferable records should continue.[4] It was further agreed that whether that work would extend to identity management, single windows and mobile commerce would be assessed at a future time.[5]

6. At its forty-eighth session (Vienna, 9-13 December 2013), the Working Group continued its work on the preparation of draft provisions on electronic transferable records. The Working Group also took into consideration legal issues related to the use of electronic transferable records in relationship with the Convention Providing a Uniform Law for Bills of Exchange and Promissory Notes (Geneva, 1930) and the Convention Providing a Uniform Law for Cheques (Geneva, 1931) (A/CN.9/797, paras. 109-112). At its forty-ninth session (New York, 28 April-2 May 2014), the Working Group continued its work on the preparation of draft provisions as presented in document A/CN.9/WG.IV/WP.128 and Add.1. At its forty-seventh session, in 2014, the Commission reaffirmed the mandate of the Working Group to

---

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

[2] Ibid., para. 235.

[3] Ibid., *Sixty-seventh Session No. 17* (A/67/17), para. 90.

[4] Ibid., *Sixty-eighth Session, Supplement No. 17* (A/68/17), para. 230.

[5] Ibid., para. 313.

develop a legislative text on electronic transferable records that would greatly assist in facilitating electronic commerce in international trade.[6]

7. At its fiftieth session (Vienna, 10-14 November 2014), the Working Group continued its work on the preparation of draft provisions as presented in document A/CN.9/WG.IV/WP.130 and Add.1. Subject to a final decision to be made by the Commission, the Working Group agreed to proceed with the preparation of a draft model law on electronic transferable records (A/CN.9/828, para. 23). At its fifty-first session (New York, 18-22 May 2015), the Working Group continued its work on the preparation of draft provisions as presented in document A/CN.9/WG.IV/WP.132 and Add.1.

8. At its forty-eighth session, in 2015, the Commission encouraged the Working Group to finalize the current work in order to submit its results at the Commission's forty-ninth session bearing in mind that an UNCITRAL model law on electronic transferable records would be accompanied by explanatory materials.[7]

II. Organization of the session

9. The Working Group, composed of all States members of the Commission, held its fifty-second session in Vienna from 9 to 13 November 2015. The session was attended by representatives of the following States members of the Working Group: Argentina, Austria, Belarus, Brazil, Canada, China, Colombia, Croatia, Czech Republic, Denmark, France, Germany, Honduras, India, Indonesia, Italy, Japan, Jordan, Kenya, Kuwait, Malaysia, Mauritania, Mexico, Pakistan, Paraguay, Philippines, Poland, Republic of Korea, Russian Federation, Singapore, Spain, Thailand, United States of America and Venezuela (Bolivarian Republic of).

10. The session was also attended by observers from the following States: Bangladesh, Belgium, Bolivia (Plurinational State of), Cyprus, Dominican Republic, Peru, Romania, Saudi Arabia, Slovakia, Sweden, Syrian Arab Republic and United Arab Emirates.

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

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

(a) *International non-governmental organizations*: Brazilian Chamber of Electronic Commerce (CAMARA-E.NET), Centre for Commercial Law Studies (Queen Mary, University of London) (CCLS), China International Economic and Trade Arbitration Commission (CIETAC), CISG Advisory Council, European Law Students' Association (ELSA), Inter-American Bar Association (IABA), International Air Transport Association (IATA), International Bar Association (IBA), International Center for Promotion of Enterprises (ICPE), International Federation of Freight Forwarders Associations (FIATA) and Law Association for Asia and the Pacific (LAWASIA).

---

[6] Ibid., *Sixty-ninth Session, Supplement No. 17* (A/69/17), para. 149.

[7] Ibid., *Seventieth Session, Supplement No. 17* (A/70/17), para. 231.

13. The Working Group elected the following officers:

Chairperson: Ms. Giusella Dolores FINOCCHIARO (Italy)

Rapporteur: Mr. Aliaksandr ZAPOLSKI (Belarus)

14. The Working Group had before it the following documents: (a) Annotated provisional agenda (A/CN.9/WG.IV/WP.134); and (b) A note by the Secretariat entitled "draft Model Law on Electronic Transferable Records" (A/CN.9/WG.IV/WP.135 and Add.1).

15. The Working Group adopted the following agenda:

1. Opening of the session.
2. Election of officers.
3. Adoption of the agenda.
4. Consideration of the draft Model Law on Electronic Transferable Records.
5. Technical assistance and coordination.
6. Other business.
7. Adoption of the report.

III. Deliberations and decisions

16. The Working Group engaged in discussions on the draft Model Law on Electronic Transferable Records on the basis of documents A/CN.9/WG.IV/WP.135 and Add.1. The deliberations and decisions of the Working Group are reflected in chapter IV below. The Secretariat was requested to revise the draft provisions to reflect those deliberations and decisions.

IV. Draft provisions on electronic transferable records

Draft article 1. Scope of application

17. It was recalled that the deliberations of the Working Group focused on provisions dealing with electronic transferable records functionally equivalent to paper-based transferable documents or instruments (A/70/17, para. 228). In light of that focus, it was proposed to delete paragraph 3 since it dealt with issues arising in connection with electronic transferable records existing only in an electronic environment. It was added that the current draft of that paragraph offered limited clarity and its interpretation could pose challenges. It was indicated that concerned jurisdictions could in any case exclude certain types of electronic transferable records from the scope of application of the law. It was also indicated that that provision could be considered again at a later stage, when reviewing the applicability of the draft Model Law to electronic transferable records existing only in an electronic environment.

18. In response, it was said that paragraph 3 provided needed guidance and flexibility to enacting States. It was added that the scope and operation of

paragraph 3 depended on the definition of electronic transferable records and that its consideration should be postponed accordingly.

19. After discussion, the Working Group agreed to retain paragraph 3 in square brackets for further consideration.

Draft article 2. Exclusions

20. It was indicated that paragraph 1 constituted an application of the principle contained in draft article 1, paragraph 2, and could therefore be deleted. However, it was suggested that an explicit reference to consumer protection law could be added in draft article 1, paragraph 2, in order to clarify that point.

21. It was noted that paragraph 3 applied to cases in which the enacting jurisdiction was a party to the Convention Providing a Uniform Law for Bills of Exchange and Promissory Notes (Geneva, 1930) and to the Convention Providing a Uniform Law for Cheques (Geneva, 1931) (the "Geneva Conventions") and considered those Conventions incompatible with the draft Model Law. It was indicated that the current text of paragraph 3 could be misread as inviting enacting States to exclude paper-based transferable documents or instruments of great practical importance. It was suggested that an open-ended list of exclusions would be more appropriate as it would encourage enacting States to selectively identify those paper-based transferable documents or instruments excluded from the scope of the law. It was also suggested that explanatory materials on exclusions from the scope of the law should refer to issues related to the Geneva Conventions.

22. After discussion, the Working Group agreed to: (i) delete draft article 2, paragraph 1; (ii) include the words "including any rule of law applicable to consumer protection" at the end of draft article 1, paragraph 2; (iii) retain the text of draft article 2, paragraph 2, as draft article 1, paragraph 4; (iv) delete draft article 2, paragraph 3; and (v) add the words ", and to […]" at the end of draft article 1, paragraph 4.

Draft article 12. Indication of time and place in electronic transferable records

23. The view was expressed that provisions on determination of time and place were not specific to electronic transferable records but contained in substantive law. Another view was expressed that the indication of time and place in electronic transferable records was already adequately addressed in draft article 10, subparagraph 1 (a). Moreover, it was indicated that paragraphs 2 and 3 were designed for contractual transactions. For those reasons, it was suggested that draft article 12 should be deleted.

24. It was noted that paragraph 1 was not technology neutral as it implied the use of a registry-based system and therefore was not adequate for the use of token-based or blockchain-based systems. It was suggested that that provision should be drafted in technology neutral terms. However, it was also suggested that the availability of specific technologies and methods, such as those used for time-stamping, should be taken into consideration when redrafting that provision. In response, it was added that caution should be exercised in drafting any new substantive rule.

25. Support was expressed for retaining draft provisions on the determination of place of business inspired by article 6 of the United Nations Convention on the Use

of Electronic Communications in International Contracts (New York, 2005) (the "Electronic Communications Convention") and contained in A/CN.9/WG.IV/WP.135/Add.1, paragraph 5. However, it was noted that those provisions did not offer positive elements for the determination of the place of business and it was suggested that further elements should be provided. In response, it was indicated that positive elements were provided by paragraphs 2 and 3 or, alternatively, would be found in applicable substantive law, such as article 10 of the United Nations Convention on Contracts for International Sale of Goods, while the suggested draft provisions had only an enabling effect, clarifying that certain elements specific to the use of electronic means did not have, per se, conclusive evidentiary value.

26. After discussion, the Working Group agreed to: (i) retain paragraph 1 for future consideration; (ii) delete paragraphs 2 and 3; and (iii) include the draft provisions contained in A/CN.9/WG.IV/WP.135/Add.1, paragraph 5 in a separate article.

Draft article 18. Presentation

27. It was noted that the current draft presented certain challenges with respect to its operation as functional equivalent both for presentation and for surrender. It was further noted that that article did not adequately deal with instances when presentation took place for acceptance. It was added that the alternative text contained in A/CN.9/WG.IV/WP.135/Add.1, paragraph 31 did not provide sufficient guidance, and that it might be preferable to continue deliberations on the basis of a new provision containing a functional equivalence rule on demonstration of control.

28. The Working Group agreed to further discuss draft article 18 on the basis of the following draft provision:

> "Where the law requires the demonstration of possession of a paper-based transferable document or instrument, that requirement is met with respect to an electronic transferable record if a reliable method is used to demonstrate control of the electronic transferable record".

29. The view was expressed that the new text did not provide sufficient guidance on presentation as it actually did not relate to presentation, but rather to a consequence of possession, and should therefore be deleted. It was suggested that a provision on functional equivalence of presentation should instead be introduced in the draft Model Law based on draft article 18 as contained in A/CN.9/WG.IV/WP.135/Add.1.

30. The view was also expressed that the new text provided a functional equivalence rule that was already set forth in draft article 17, establishing exclusive control as functional equivalent of possession, and should therefore be deleted. It was suggested that the explanatory materials to the draft Model Law should clarify that draft article 17 would operate also with respect to presentation.

31. Another view was expressed that presentation as such did not require a functional equivalence rule, but that the steps needed for presentation, including demonstration of possession of the paper-based transferable document or instrument, required that rule. It was added that the new text of draft article 18 was

useful in providing for all cases in which the law required demonstration of possession, including presentation.

32. It was further suggested that a provision on presentation should also refer to the functional equivalent of delivery of the paper-based transferable document or instrument. In response, it was noted that the functional equivalence rule of delivery of a paper-based transferable document or instrument already existed and consisted of the transfer of exclusive control on the electronic transferable record. It was added that a provision on delivery had been deleted from the draft Model Law (A/CN.9/834, paras. 31-33).

33. It was indicated that presentation was a necessary step in the life cycle of electronic transferable records and that the omission of a provision on presentation in the draft Model Law might pose practical challenges. In response, it was said that the system agreement would usually include provisions on the ability of control and the manner to indicate control, including those relevant for presentation.

34. It was explained that presentation could have a different meaning in the various jurisdictions and require different actions, such as provision of information, submission of a request for performance or acceptance and delivery of a transferable document or instrument. In that regard, it was noted that the draft Model Law already contained equivalence rules for several functions pursued by those actions, such as signature, written form and transfer of control. It was added that a core element of the concept of presentation was demonstration of possession of a paper-based transferable document or instrument, and that demonstration of control of an electronic transferable record was its functional equivalent (see para. 28 above).

35. A suggestion was to include the words “for presentation” after the words “transferable document or instrument” in the alternative text of draft article 18 contained in paragraph 28 above in order to better reflect its purpose.

36. After discussion, the Working Group agreed to delete draft article 18 and reflect the discussion on the core elements of presentation in the explanatory materials. The Working Group was of the view that presentation did not raise issues of functional equivalence in the context of the Model Law.

Draft article 11. General reliability standard

37. The Working Group started its deliberations by considering the following drafting proposal:

> “For the purposes of this Law, a method shall be considered reliable if it is:
>
> (1) As reliable as appropriate for the fulfilment of the function for which the method is being used, in the light of any relevant agreement, or, in the absence of such agreement, of all relevant circumstances, which may include:
>
> (a) The level of assurance of data integrity;
>
> (b) The ability to prevent unauthorized access to and use of the method;
>
> (c) The expertise and resources deployed in the setting up and continued administration of the method;
>
> (d) The regularity and extent of audit by an independent body, if any;

(e) The existence of a declaration, if any, by a supervisory or accreditation body or voluntary scheme regarding the reliability of the method;

(f) Information on past performance of the method;

(g) Any applicable industry standard;

(h) The maturity of the technology used and its proven ability to perform the relevant function; or

(2) Proven in fact to have fulfilled the function for which the method is being used, by itself or together with further evidence."

38. It was explained that that alternative draft gave prevalence to contractual agreements in assessing reliability in order to support developments in technology and business practices. It was also explained that the list of criteria for the determination of reliability was illustrative and non-exhaustive, and that it would find application only in absence of any contractual agreement.

Chapeau of the alternative proposal

39. It was indicated that the general reference to "for the purposes of this Law" contained in the chapeau was inappropriate since each article referring to the use of a reliable method pursued a different function. It was added that each reliability requirement associated with a function should be fulfilled separately. Accordingly, it was suggested that reference should be made to each specific article.

Paragraph 1 of the alternative proposal

40. Concerns were expressed that paragraph 1 gave excessive prevalence to contractual agreements that could lead to validation of a non-reliable standard. It was added that that result was undesirable since it could ultimately affect property, including that of third parties.

41. In response, it was indicated that contractual agreements should prevail over other factors when assessing reliability as parties were in the best position to assess risks and allocate resources. Reference was made to draft article 5 on party autonomy as a general provision enabling the parties to establish the desired level of reliability.

42. Support was expressed for including in the draft article a list of factors relevant in assessing reliability. However, concerns were expressed on several listed factors. In particular, it was noted that assurance of data integrity was an absolute notion that could not be expressed by reference to a level.

Paragraph 2 of the alternative proposal

43. It was explained that paragraph 2 aimed at preventing frivolous litigation by validating methods that had in fact achieved their function regardless of any abstract assessment of their reliability. In that light, broad support was expressed for the retention of paragraph 2.

Ex post and ex ante assessment of reliability

44. Consensus was expressed on the view that the draft provision should adopt a technology neutral approach and not a prescriptive one. It was further explained that, while the draft provision aimed at providing guidance on the assessment of the reliability standard in case of dispute ("ex post" reliability assessment), its content would necessarily also influence the design of the system ("ex ante" reliability assessment).

45. In light of the above considerations, the Working Group agreed to continue its deliberations on the basis of draft article 11 as contained in A/CN.9/WG.IV/WP.135 with (i) the incorporation of a reference to parties' agreement in paragraph 1; (ii) the deletion of the words "level of" in subparagraph 2 (a); and (iii) the retention of paragraph 2 of the alternative proposal as a new paragraph 3, as follows:

> "1. The standard of reliability required shall be assessed in the light of the purpose for which the information contained in the electronic transferable record was generated and in the light of all the relevant circumstances, including any contractual agreement.
>
> "2. In determining whether, or to what extent, a method is reliable [for the purposes of articles ...], regard may be had to the following factors:
>
> (a) Assurance of data integrity;
>
> (b) Ability to prevent unauthorized access to and use of the system;
>
> (c) Quality of hardware and software systems;
>
> (d) Regularity and extent of audit by an independent body;
>
> (e) The existence of a declaration by a supervisory body, an accreditation body or a voluntary scheme regarding the reliability of the method;
>
> (f) Any other relevant factor.
>
> "3. A method shall be considered reliable if proven in fact to have fulfilled the function for which the method is being used, by itself or together with further evidence."

46. It was explained that the list of factors contained in paragraph 2 was illustrative and not exhaustive. It was added that caution should be exercised so that the list would not be interpreted as encouraging litigation.

The role of party agreement in assessing reliability

47. Concerns were expressed on the reference to party agreement contained in paragraph 1 of the alternative proposal. It was said that the use of paper-based transferable documents or instruments relied on objective elements such as possession, while the reference to party agreement introduced a subjective element that could interfere with functional equivalence rules, thus affecting, inter alia, singularity of claims. The concern was also expressed that party agreement could be used to circumvent requirements contained in substantive law or public policy provisions.

48. In that line, it was noted that the reliability of the system had to be determined in a uniform manner across the ecosystem, which could be achieved only by courts applying objective standards. It was added that subjective reliability standards could affect third parties that were not a party to any agreement on those standards. In view of those concerns, it was suggested that reference to party agreement should be deleted in order to improve third party protection and, ultimately, the appeal of electronic transferable records to the market.

49. In response, it was said that draft article 11 did not aim at affecting substantive rights or the validity of an electronic transferable record but only at allowing to address system standards contractually. It was added that the use of electronic transferable records involved the use of a system and the existence of a contractual agreement, and that parties not confident in the reliability of a system could refuse to use it. In response, it was noted that the existence of such agreement when using token-based or blockchain-based systems was not always evident.

50. The view was expressed that the contractual agreement should be only one of the elements relevant to determine the level of reliability. The view was also expressed that contractual agreements should be considered only when objective standards could not be satisfied. According to yet another view, objective and subjective standards for the assessment of reliability were not in contradiction but complementary since party agreement could complete and qualify objective standards.

Safety clause

51. It was indicated that the provision contained in paragraph 3 of the alternative proposal would provide additional certainty by discouraging frivolous litigation when a method had in fact fulfilled its function. It was clarified that the provision referred to fulfilment of the function in the specific case under dispute and did not aim at predicting reliability based on past performance of the method.

52. It was noted that paragraph 3 of the alternative draft proposal did not aim at establishing when a method was reliable, but was actually operating as an alternative to the assessment of the reliability of the method. It was suggested that the provision should be redrafted accordingly.

53. In light of the above comments, the following proposal was submitted for the consideration of the Working Group:

> "1. For the purposes of articles […] the method referred to shall be:
>
> (a) As reliable as appropriate for the fulfilment of the function for which the method is being used, in the light of all relevant circumstances, which may include:
>
> (i) The operational rules governing the system;
>
> (ii) The assurance of data integrity;
>
> (iii) The ability to prevent unauthorized access to and use of the system;
>
> (iv) The quality of hardware and software systems;
>
> (v) The regularity and extent of audit by an independent body;

(vi) The existence of a declaration by a supervisory body, an accreditation body or a voluntary scheme regarding the reliability of the method;

(vii) Any applicable industry standard;

(viii) Any other relevant factor; or

(b) Proven in fact to have fulfilled the function by itself or together with further evidence.

"2. In the event of a dispute on method reliability between parties to a contract, regard shall be had to the agreement between the parties in so far as relevant."

54. The view was expressed that reference to each method and its respective function introduced a number of new standards, thus making the provision unnecessarily complex and difficult to interpret. In response, it was said that such reference actually clarified the operation of the draft provision, given that each reference to a reliable method contained in the draft Model Law referred to a different function, which had to be fulfilled individually.

55. It was suggested that a reference to "the purpose for which the information contained in the electronic transferable record was generated" should be inserted in the draft provision.

56. It was indicated that the reference to any applicable industry standard in subparagraph 1 (a)(vii) would allow keeping flexibility while providing guidance. It was added that those standards would have to be internationally recognized. Yet, it was responded that some standards might not be appropriate for certain types of transactions, for instance those involving consumers, and that therefore the qualifier "as appropriate" should be added. It was replied that, on the one hand, the application of consumer protection rules was not affected by the draft Model Law and, on the other hand, electronic transferable records were usually handled by highly-skilled professionals. Another view suggested referring to "industry best practices" instead.

57. With respect to the reference to operational rules in subparagraph 1 (a)(i), it was explained that those rules were usually contained in an operating manual whose application could be monitored by an oversight body and that, as such, did not have a purely contractual nature, although they could be included in an agreement between the system provider and the user. It was suggested that that reference should be limited to "operational rules on the assessment of reliability" so as not to refer to rules irrelevant for the draft provision.

Scope of paragraph on party autonomy

58. It was explained that paragraph 2 aimed at clarifying that parties could allocate liability arising from the use of a system by agreeing on the level of system reliability. It was also explained that the provision would ensure that parties would be bound by their agreements without affecting third parties. It was further clarified that paragraph 2 did not aim at interfering with substantive law, for instance by allowing validation of an otherwise invalid electronic transferable record through agreement of the parties on the use of an unreliable method.

59. In response, the concern was again expressed that paragraph 2 might be interpreted as introducing a separate subjective legal regime for electronic transferable records, and that that legal regime could be used to circumvent substantive law and provisions of mandatory application. It was added that the relation between paragraph 1, in particular the reference to "the operational rules governing the system", and paragraph 2 was not clear. It was therefore suggested that paragraph 2 should be deleted.

60. A third view was that paragraph 2 was not useful, since it stated the obvious rule that any agreement on system reliability would be relevant among the parties to that agreement. It was noted that draft article 5 already allowed for concluding such an agreement.

61. It was noted that the reference to disputes in paragraph 2 was redundant and that the drafting technique was unusual. It was also noted that the only relevant disputes under paragraph 2 of the proposal were disputes relating to reliability of the method.

62. In light of the concerns expressed, a new draft of paragraph 2 was proposed:

> "For the purposes of assessing [the required level of] reliability between parties to an agreement, regard shall be had to such agreement in so far as relevant."

63. It was said that the new proposal did not address the concerns expressed in relation to the prevalence of party agreement and the introduction of subjective standards.

64. In light of the different views on the scope of paragraph 2, the Working Group agreed that the intended scope should be better clarified. It was suggested that the relation between paragraphs 1 and 2 be clarified as well.

Paragraph 1

65. The Working Group considered the following draft of paragraph 1:

> "1. For the purposes of articles […] the method referred to shall be:
>
> (a) As reliable as appropriate for the fulfilment of the function for which the method is being used, [in the light of the purpose for which the information contained in the electronic transferable record was generated and] in the light of all relevant circumstances, which may include:
>
> (i) The operational rules on the assessment of reliability governing the system;
>
> (ii) The assurance of data integrity;
>
> (iii) The ability to prevent unauthorized access to and use of the system;
>
> (iv) The quality of hardware and software systems;
>
> (v) The regularity and extent of audit by an independent body;
>
> (vi) The existence of a declaration by a supervisory body, an accreditation body or a voluntary scheme regarding the reliability of the method;

(vii) Any applicable industry best practices; or

(b) Proven in fact to have fulfilled the function agreed to by itself or together with further evidence."

66. It was explained that reference to "any other relevant factor" had been omitted from the list of factors since the words "which may include" sufficiently clarified that the list was not exhaustive and had an illustrative nature only. It was also explained that, depending on the final form of draft article 11, other articles referring to a reliable method, such as draft articles 9, 10 and 17, would be modified accordingly.

The purpose for which the information was generated

67. It was said that the words "all relevant circumstances" included the purpose for which the information contained in the electronic transferable record was generated, and that therefore the bracketed text in subparagraph 1 (a) should be deleted.

Operational rules

68. It was explained that the reference to rules on assessment of reliability aimed to clarify that only operational rules regarding the reliability of the system, and not operational rules in general, should be considered (see para. 57 above). It was suggested to replace the word "on" with "relevant to" to better specify which rules on reliability were relevant.

Data integrity

69. It was suggested that data integrity had a different nature than other listed factors, as it was a parameter of a functional equivalence rule and, as such, already contained in draft article 10. For that reason, it was added, its inclusion in draft article 11 would introduce a circular argument. In that light, it was suggested that the reference to data integrity be deleted.

70. In response, it was said that data integrity should be retained as draft article 11 served as a general reliability standard applicable also to draft articles that did not mention integrity. It was added that, due to the illustrative nature of the list of circumstances relevant for the assessment of reliability, neither retention nor deletion of the reference to data integrity would affect consideration of that element when relevant.

Any applicable industry best practices

71. With regard to "industry best practices", it was noted that reference to "industry standards" was preferable since those standards could be more easily ascertained. However, it was also noted that caution should be exercised in referring to industry standards, since that reference could lead to violating the principle of technology neutrality. It was therefore suggested that the reference to industry standards should be deleted.

Subparagraph 1 (b)

72. The view was expressed that subparagraph 1 (b) should be deleted as it introduced a standard assessing reliability based on past performance of the method. In response, it was explained that a similar rule was contained in article 9(3)(b)(ii) of the Electronic Communications Convention and had proven to be useful. In further response, it was said that the draft Model Law was different in scope from the Electronic Communications Convention and that technological developments since the adoption of that Convention should also be taken into account. In reply, it was indicated that, although the scope of the two texts was different, the purpose of the provision was the same, namely avoiding frivolous litigation, which was deemed particularly useful.

73. After discussion, the Working Group agreed with respect to paragraph 1 to: (i) delete the words "in the light of the purpose for which the information contained in the electronic transferable record was generated" in subparagraph (a); (ii) to replace the word "on" with "relevant to" in subparagraph (a)(i); (iii) retain the reference to "the assurance of data integrity" in subparagraph (a)(ii) with clarification in explanatory materials on its purpose and relation with other provisions; (iv) insert the word "industry standards" instead of "best practices" in subparagraph (a)(vii); and (v) retain subparagraph (b).

Paragraph 2

74. With respect to paragraph 2, in the alternative text provided in paragraph 62 above, it was indicated that a reference to contractual agreements could assist significantly when assessing the level of reliability of a method since those agreements often contained useful guidance on technical details. In that respect, reference was made to service level agreements. However, it was also suggested that paragraph 2 might be redundant, since draft article 5 already provided for party autonomy. It was also said that, if paragraph 2 was maintained, explanatory materials should clarify that the provision was simply an application of the fundamental contract law principle of party autonomy.

75. After discussion, there was broad consensus that the scope of paragraph 2 was limited to allocation of liability arising from an agreement on the reliability of the method. There was also broad consensus that paragraph 2 should not affect third parties. Broad consensus was further expressed that paragraph 2 should not affect mandatory substantive law provisions such as those relating to the validity of electronic transferable records.

76. On the basis of that shared understanding, the Working Group agreed to retain paragraph 2 in square brackets for further consideration.

Draft article 25. Non-discrimination of foreign electronic transferable records

77. The importance of legally enabling the cross-border use of electronic transferable records was stressed. It was noted that draft article 25 aimed at achieving that goal by preventing discrimination on the basis of the geographic origin of the electronic transferable record, while, at the same time, respecting the application of relevant private international law rules.

78. It was indicated that the creation of a special private international law regime for electronic transferable records was not necessary, as the regime applicable to equivalent paper-based transferable documents or instruments would suffice. It was added that a dual private international law regime would not be desirable.

79. In response, it was noted that an electronic transferable record might be issued in a jurisdiction that did not recognize the use of electronic transferable records, and that recognition of its validity could be sought in a jurisdiction that allowed that use. In that case, it was added, it could be useful to permit recognition of the validity of the electronic transferable record in the latter jurisdiction, provided legal requirements set forth in that jurisdiction were met.

80. Reference was made to the possibility of introducing reciprocity standards in the cross-border recognition of electronic transferable records. Reference was also made to the practical relevance of trust frameworks and, in general, of third-party service providers in facilitating that cross-border recognition.

81. It was explained that one policy goal of the draft Model Law was to promote widespread use of electronic transferable records in business practice and that that goal could be achieved by enabling the cross-border use of electronic transferable records regardless of the number of jurisdictions enacting the draft Model Law.

82. After discussion, the Working Group decided to further consider draft article 25 at a future session.

Draft article 20. Amendment

83. It was suggested that the words “modification of information contained in” should replace the first occurrence of the words “amendment of” in draft article 20. In response, it was indicated that reference to “amendment of” was more accurate than reference to “modification of information contained in” and should be retained.

“readily”

84. It was suggested that the word “readily” should be deleted as it introduced a subjective standard and that reference to “identifiable” was sufficient. Concern was expressed that such requirement could impose excessive burden and cost on system operators.

85. In response, it was indicated that users should be able to easily identify the amended information in an electronic environment in a manner similar to the paper-based environment (A/CN.9/828, para. 88 and A/CN.9/WG.IV/WP.135/Add.1, para. 40).

86. A further view was that the insertion of a qualifier to “identifiable” was important, but that another term, such as “clearly”, “easily” or “obviously”, could be used to address the concerns expressed. It was also suggested to replace “identifiable” with “identified” to introduce an objective standard.

87. After discussion, the Working Group agreed to: (i) retain in draft article 20 the text contained in A/CN.9/WG.IV/WP.135/Add.1, para. 39; (ii) delete the word “readily”; and (iii) replace the word “identifiable” with “identified”.

Draft article 3. Definitions

"amendment"

88. It was noted that the term "amendment" occurred only in draft article 20, which contained a functional equivalence rule. In that light, the Working Group agreed to delete the definition of amendment.

"issuer", "replacement" and "obligor"

89. The Working Group agreed to delete the definition of "issuer", "replacement" and "obligor" since those terms no longer appeared in the draft Model Law.

"performance of obligation"

90. The Working Group agreed to delete the definition of "performance of obligation" since that definition was a matter of substantive law.

"electronic transferable record"

91. It was indicated that the definition of electronic transferable record contained in paragraph 30 of A/CN.9/WG.IV/WP.135 reflected the functional equivalent approach. It was added that the definition did not apply to electronic transferable records that existed only in an electronic environment, for which a different definition would be needed. It was indicated that the commentary to accompany the Model Law should state that the Model Law did not preclude the development and use of electronic transferable records that did not have a paper equivalent as those records would not be governed by the Model Law.

92. The Working Group agreed to retain the definition of electronic transferable record contained in paragraph 30 of A/CN.9/WG.IV/WP.135.

"paper-based transferable document or instrument"

93. As an editorial matter and in the English language only, it was agreed that the words "paper-based" should be deleted throughout the draft Model Law since the definition of transferable document or instrument sufficiently clarified that those documents or instruments were paper-based. The Secretariat was asked to verify in which other languages that deletion was possible in light of the terminology used.

94. The Working Group agreed to delete the indicative list of transferable documents or instruments from the definition of "transferable document or instrument" and to insert that list for illustrative purposes only in explanatory materials, which would also indicate that applicable substantive law would clarify which documents or instruments were transferable in the various jurisdictions.

95. The Working Group agreed to retain the word "indicated" outside square brackets in the definition of "transferable document or instrument".

"electronic record"

96. It was indicated that the definition of "electronic record" should reflect the composite nature of an electronic transferable record, which, in turn, was particularly relevant for the notion of "integrity" contained in paragraph 2 of draft article 10. For that purpose, it was suggested to retain the words "including, where

appropriate, all information logically associated with or otherwise linked" outside the square brackets. It was also suggested to retain the word "not" outside the square brackets and to delete the word "subsequently", since the generation of metadata did not necessarily take place after the generation of a record, but could also precede it.

97. It was explained that the word "logically" in the definition of "electronic record" referred to computer software and not to human logic.

98. The Working Group agreed to retain the following definition of "electronic record":

> "electronic record" means information generated, communicated, received or stored by electronic means, including, where appropriate, all information logically associated with or otherwise linked together so as to become part of the record, whether generated contemporaneously or not.

"Control"

99. The Working Group considered the definition of "control" in conjunction with draft article 17 on control as a functional equivalent of possession.

100. It was indicated that there was no need to define "control" since that definition was implicit in draft article 17. It was added that the current definition of "control" was not in line with draft article 17. It was suggested that any useful element present in the definition of "control" could be incorporated in draft article 17.

101. It was stated that both control and possession were factual situations and that the person in control of an electronic transferable record was in the same position as the possessor of an equivalent transferable document or instrument. It was also stated that control could not affect or limit the legal consequences arising from possession and that those legal consequences would be determined by applicable substantive law. Broad consensus was expressed on those statements. It was further stated that parties could agree on the modalities for the exercise of possession, but not modify the notion of possession itself.

102. Based on that shared understanding, to be reflected in explanatory materials, the Working Group agreed to delete the definition of "control".

V. Other business

A. Future work

103. The Working Group recalled that, at its forty-eighth session, the Commission instructed the Secretariat to conduct preparatory work on identity management and trust services, cloud computing and mobile commerce, including through the organization of colloquia and expert group meetings, for future discussion at the Working Group level following the current work on electronic transferable records. It also recalled that the Commission asked the Secretariat to share the result of that preparatory work with Working Group IV, with a view to seeking recommendations on the exact scope, possible methodology and priorities for the consideration of the Commission at its forty-ninth session (A/70/17, para. 358).

104. Reference was made to the proposal submitted to the Commission at its forty-eighth session on possible future work related to identity management and trust services (A/CN.9/854). It was explained that laws and practices already existed in that area, and that their harmonization should be a matter of priority. It was added that it was particularly important to ensure inclusion of all regions, economic and legal systems and, for that reason, it was suggested that a colloquium should be organized to better define scope and methodology of the future work, with a view to reporting the findings to the Commission at its next session.

105. Reference was also made to the proposals submitted to the Commission for its consideration at its forty-seventh and forty-eighth sessions on possible future work related to cloud computing (A/CN.9/823 and A/CN.9/856). It was explained that those proposals relied on significant work already carried out at the national and international levels. Specific reference was made to the relevant recommendations contained in the UNCTAD Information Economy Report 2013 — The Cloud Economy and Developing Countries (UNCTAD/IER/2013) as a valuable starting point for future work. In that light, it was suggested that preparatory work should be carried out in an inclusive manner through informal expert consultations with a view to preparing a reference document on the nature of suggested work, the intended approach and tentative content for the consideration of the Commission at its next session.

106. The Working Group asked the Secretariat to provide support, within available resources, to the above proposals, including by exploring the possibility to hold a colloquium on legal issues related to identity management and trust services. It was noted that, in line with the decision of the Commission, the Working Group should prioritize the finalization of its current work on the draft Model Law on Electronic Transferable Records. In that light, the Working Group agreed that no colloquium should be held during the fifty-third session of the Working Group.

B. Technical assistance and other activities

107. With respect to technical assistance and other activities, it was said that the recently-adopted Protocol on the Legal Framework to Implement the ASEAN Single Window made specific reference to the Electronic Communications Convention as a relevant principle for transactions between national single windows in the ASEAN single window environment. Furthermore, it was said that Chapter 14 (Electronic Commerce), Section 5.1 of the Trans-Pacific Partnership indicated that State parties to that treaty should maintain a legal framework governing electronic transactions consistent with the principles of the UNCITRAL Model Law on Electronic Commerce or the Electronic Communications Convention.

108. It was added that UNCITRAL continued to provide active contribution to the negotiation of a Regional Arrangement for the Facilitation of Cross-border Paperless Trade conducted at UN/ESCAP, and that technical assistance to legislative reform in the field of electronic commerce and paperless trade was being provided, in cooperation with UN/ESCAP, to the Republic of the Maldives.