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Draft provisions on electronic transferable records

Note by the Secretariat

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I. Introduction

1. At its forty-fourth session, in 2011, the Commission mandated the Working Group to undertake work in the field of electronic transferable records.¹
2. At its forty-sixth session (Vienna, 29 October-2 November 2012), broad support was expressed by the Working Group for the preparation of draft provisions on electronic transferable records, to be presented in the form of a model law without prejudice to the decision on the final form of its work (A/CN.9/761, paras. 90-93).
3. At its forty-seventh session (New York, 13-17 May 2013), the Working Group began reviewing the draft provisions on electronic transferable records as provided in document A/CN.9/WG.IV/WP.122 and noted that while it was premature to start a discussion on the final form of work, the draft provisions were largely compatible with different outcomes that could be achieved.
4. At its forty-eighth session (Vienna, 9-13 December 2013), the Working Group continued its consideration of the draft provisions as contained in document A/CN.9/WG.IV/WP.124 and Add.1.
5. 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. The Working Group focused its discussion on concepts of original, uniqueness, and integrity of an electronic transferable record. Part II of this note contains the draft provisions reflecting the deliberations and decisions of the Working Group during that session (A/CN.9/804, paras. 17-86).

II. Draft provisions on electronic transferable records

A. General

“Draft article 1. Scope of application

- “1. This law applies to electronic transferable records.
- “2. Other than as provided for in this law, nothing in this law affects the application to an electronic transferable record of any rule of law governing a paper-based transferable document or instrument.
- “[3. This law applies to electronic transferable records other than as provided by [law governing a certain type of electronic transferable record to be specified by the enacting State].”

Remarks

6. Draft article 1 reflects the Working Group’s deliberations at its forty-eighth session (A/CN.9/797, paras. 16-17). Draft article 1, paragraph 2, would,

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

for instance, facilitate the issuance of an electronic transferable record to bearer when permitted under substantive law (A/CN.9/797, para. 65).

7. Draft article 1, paragraph 3, would only be applicable in States that have enacted legislation on electronic transferable records that exist only in an electronic environment. In such case, paragraph 3 aims at allowing the application of the draft provisions also to those electronic transferable records, without interfering with their substantive law. Hence, this paragraph would not be necessary in jurisdictions where no such electronic transferable record exists. The Working Group agreed that a decision on paragraph 3 could only be made in light of the final form of the draft provisions, which has not yet been determined (A/CN.9/797, para. 17).

“Draft article 2. Exclusions

“1. This law does not override any rule of law applicable to consumer protection.

“2. This law does not apply to securities, such as shares and bonds, and other investment instruments.

“3. [This law does not apply to bills of exchange, promissory notes and cheques.]”

Remarks

8. Draft article 2 reflects the Working Group’s deliberations at its forty-eighth session (A/CN.9/797, paras. 18-20). The term “investment instrument” is understood to include derivative instruments, money market instruments and any other financial product available for investment (A/CN.9/797, para. 19).

9. The Working Group may wish to discuss the relationship between draft article 2, paragraph 1 and draft article 1, paragraph 2, of the draft provisions.

10. As a reference, the Working Group may wish to compare the language used in the “Rome II” Regulation,² to exclude from the application of the Regulation “non-contractual obligations arising under bills of exchange, cheques and promissory notes and other negotiable instruments to the extent that the obligations under such other negotiable instruments arise out of their negotiable character”. Therefore, it is understood that “other transferable documents, such as investment securities and loans”³ fall within the scope of the Regulation. However, the ultimate result may depend on domestic law, as, for instance, in certain jurisdictions shares and bonds are considered negotiable instruments and would therefore be excluded from the scope of the Regulation.

11. Paragraph 3 reflects the view that, if the final form of the draft provisions were a treaty, certain paper-based transferable documents or instruments should be excluded from its scope of application in order to avoid conflicts with other treaties such as the Convention Providing a Uniform Law for Bills of Exchange and Promissory Notes (Geneva, 1930) and the Convention Providing a Uniform Law for

² Regulation (EC) No. 864/2007 of the European Parliament and of the Council of 11 July 2007 on the law applicable to non-contractual obligations (Rome II), Official Journal L 199, 31/7/2007, pp. 40-49.

³ See Philip R. Wood, *Conflict of Laws and International Finance (The Law and Practice of International Finance*, Vol. 6), 2007, sub 11-043.

Cheques (Geneva, 1931) (the “Geneva Conventions”) (A/CN.9/797, paras. 20, 109-112; see also A/CN.9/WG.IV/WP.125).

12. Moreover, if the final form of the draft provisions were a model law, the Working Group may wish to consider whether paragraph 3 should be retained to provide guidance to those jurisdictions that are parties to the Geneva Conventions as well as any other relevant conventions when they wish to enact that model law.

“Draft article 3. Definitions

“For the purposes of this law:”

Remarks

13. The definitions in draft article 3 have been prepared as a reference and should be examined in the context of the relevant draft articles. The terms are presented in the order they appear throughout the draft provisions (A/CN.9/768, para. 34). Remarks for consideration by the Working Group have been placed after each definition.

14. All references to “holder” in the draft provisions have been deleted and replaced with “person in control” (A/CN.9/804, para. 85). The Working Group may wish to clarify in draft article 3 that a “person” may either be a natural or a legal person.

“electronic transferable record” means [an electronic record] that entitles the person in control to claim the performance of the obligation [indicated] in the record and that is capable of transferring the right to performance of the obligation [indicated] in the record through the transfer of that record.

“paper-based transferable document or instrument” means a transferable document or instrument issued on paper that entitles the person in control to claim the performance of the obligation [indicated] in the document or instrument and that is capable of transferring the right to performance of the obligation [indicated] in the document or instrument through the transfer of that document or instrument.

Paper-based transferable documents or instruments include bills of exchange, cheques, promissory notes, [consignment notes,] bills of lading and warehouse receipts.

Remarks

15. The definitions of “electronic transferable record” and “paper-based transferable document or instrument” reflect the Working Group’s deliberations at its forty-eighth session (A/CN.9/797, paras. 21-28). These definitions do not aim at affecting the fact that substantive law shall determine whether the person in control is the rightful person in control as well as the substantive rights of the person in control.

16. The definition of “electronic transferable record” does not aim at describing all the functions possibly related to the use of an electronic transferable record. For instance, an electronic transferable record may have an evidentiary value; however, the ability of that record to discharge that function will be assessed under law other than the draft provisions.

17. The Working Group confirmed that certain documents or instruments, which are generally transferable, but whose transferability is limited due to other agreements, such as straight bills of lading, would not fall under either of these two definitions and that the draft provisions should only focus on “transferable” documents (A/CN.9/797, paras. 27-28).

18. The Working Group may wish to consider whether the term “[indicated]” in square brackets in both draft definitions is appropriate or whether other terms might be used such as “incorporated”, “specified” or “contained” (A/CN.9/797, para. 22).

19. The Working Group may wish to take into account the definition of “electronic record” when considering the definition of “electronic transferable record”.

20. The Working Group may wish to consider deleting the definition of paper-based transferable document or instrument as it concerns substantive law.

21. The Working Group may wish to consider whether the indicative list of paper-based transferable documents or instruments, which is inspired by article 2, paragraph 2 of the United Nations Convention on the Use of Electronic Communications in International Contracts (New York, 2005) (the “Electronic Communications Convention”), should be included in the definition of “paper-based transferable document or instrument” or in explanatory material (A/CN.9/768 para. 34 and A/CN.9/797 paras. 25-26). The Working Group may also wish to consider whether to retain the reference to consignment notes, which are not transferable in certain jurisdictions.

“electronic record” means information generated, communicated, received or stored by electronic means [, including, where appropriate, all information logically associated or otherwise linked [together] [thereto] [so as to become part of the record], whether generated contemporaneously or [not] [subsequently]].

Remarks

22. The definition of “electronic record” is based on the definition of “data message” contained in the UNCITRAL Model Law on Electronic Commerce (1996) and in the Electronic Communications Convention. The bracketed text aims at highlighting the fact that information may be associated with the electronic transferable record at the time of issuance or thereafter (e.g., information related to endorsement) (A/CN.9/797, paras. 43-45). That bracketed text is also meant to clarify that some electronic records could, but do not need to, include a set of composite information (A/CN.9/797, para. 43).

“issuer” means a person that issues, directly or with the assistance of a third party, an electronic transferable record.

Remarks

23. The Working Group may wish to consider whether to retain the definition of “issuer” in light of the deletion of a draft provision on issuance (A/CN.9/797, paras. 64-67). The term “issuer” appears in draft articles 26 on replacement and 27 on division and consolidation.

24. The words “, directly or with the assistance of a third party,” aim at clarifying that when an electronic transferable record is issued by a third-party service provider upon the issuer’s request, the third-party service provider is not considered an issuer under the draft provisions (A/CN.9/768, para. 33).

“*control*” of an electronic transferable record means the [de facto power to deal with or dispose of that electronic transferable record] [power to factually deal with or dispose of the electronic transferable record] [control in fact of the electronic transferable record].

Remarks

25. The Working Group may wish to consider the draft definition of “control” in conjunction with draft article 18 on possession.

“*transfer*” of an electronic transferable record means the transfer of control over an electronic transferable record.

Remarks

26. At its forty-ninth session, the Working Group decided to delete a draft rule conveying that transfer of control over an electronic transferable record was necessary to transfer that electronic transferable record (A/CN.9/804, paras. 82 and 85). The Working Group may wish to consider whether to retain the draft definition of “transfer” in light of that decision as well as of draft article 23 on transfer.

“*amendment*” means the modification of information contained in the electronic transferable record in accordance with the procedure set out in draft article 24.

Remarks

27. The Working Group may wish to consider whether to retain this definition in light of draft article 24 on amendment and of the remarks to that draft article. The term “amendment” occurs only in that draft article.

“*performance of obligation*” means the delivery of goods or the payment of a sum of money as specified in a paper-based transferable document or instrument or an electronic transferable record.

Remarks

28. The Working Group may wish to consider whether to retain this definition, which refers generally to the delivery of goods or the payment of a sum of money as mentioned in article 2, paragraph 2, of the Electronic Communications Convention (A/CN.9/761, para. 22). The term “performance of obligations” appears in the definitions of “electronic transferable record” and of “paper-based transferable document or instrument”.

“*obligor*” means the person [indicated] in a paper-based transferable document or instrument or in an electronic transferable record as having the obligation to perform [the obligation contained in that document, instrument or record].

Remarks

29. The definition of “obligor” has been reviewed in order to further clarify that it has only descriptive value and that substantive law shall determine who the obligor is.

30. The Working Group may wish to consider whether the definition of “obligor” should be retained in light of the fact that the notion may be defined under substantive law. The term “obligor”, like the term “issuer”, appears in draft articles 26 and 27, respectively on replacement, and division and consolidation.

31. If the definition of “obligor” is retained, the Working Group may wish to consider whether the term “[indicated]” in square brackets is appropriate or whether other terms might be used such as “incorporated”, “specified” or “contained” (see above, para. 18).

“*replacement*” means substitution of a paper-based transferable document or instrument with an electronic transferable record or [vice versa] [conversely].

Remarks

32. The Working Group may wish to consider whether the definition should be limited to instances where there is change only in the medium in accordance with the procedure set out in draft article 26 on replacement, or whether it should be broadened to include instances where an electronic transferable record was reissued to substitute for another electronic transferable record according to draft article 25 (see A/CN.9/WG.IV/WP.124/Add.1, para. 27).

“*third-party service provider*” means a third party providing services related to [the use of] electronic transferable records [in accordance with articles 31 and 32].”

33. The words “[in accordance with articles 31 and 32]” are in square brackets pending deliberations of the Working Group on those draft provisions.

34. The Working Group may wish to consider whether the words [the use of] should be deleted to ensure consistency with the definition of “certificate service provider” contained in article 2(e) of the UNCITRAL Model Law on Electronic Signatures (2001).

“Draft article 4. Interpretation

“1. This law is derived from [...] of international origin. In the interpretation of this law, regard is to be had to the international origin and to the need to promote uniformity in its application [and the observance of good faith].

“2. Questions concerning matters governed by this law which are not expressly settled in it are to be settled in conformity with the general principles on which this law is based.”

Remarks

35. Draft article 4 is intended to draw the attention of courts and other authorities to the fact that the draft provisions should be interpreted with reference to their international origin in order to facilitate uniform interpretation (A/CN.9/768, para. 35). The square bracketed text in paragraph 1 would depend on the final form

of the draft provisions and the paragraph itself would need to be revised accordingly.

36. The notion of “general principles” contained in paragraph 2 has been used in several UNCITRAL texts. Article 7 of the United Nations Convention on Contracts for the International Sale of Goods (Vienna, 1980) (“CISG”) is the provision containing that notion that has been most interpreted by case law.

37. The UNCITRAL Digest of Case Law on the United Nations Convention on Contracts for the International Sale of Goods (2012) lists several general principles relevant to article 7 of the CISG according to case law, including: party autonomy; estoppel; place of payment of monetary obligations; mitigation of damages; and favor contractus. Those general principles may be contained in specific provisions of the CISG and applied in other cases falling under the scope of the CISG.

38. However, not all the general principles that have been identified in the CISG gather the same level of support in being recognised as such. Moreover, determination of the content and operation of those general principles takes place progressively. Such progressive determination assists in ensuring flexibility in the interpretation of the CISG and in adapting the CISG to evolving commercial practices and business needs.

39. The notion of “general principles” contained in draft article 4, paragraph 2, of the draft provisions refers to the general principles of electronic transactions (A/CN.9/797, para. 29), including those already stated in relevant UNCITRAL texts. In this line, the Working Group may wish to confirm that the three fundamental principles of non-discrimination of electronic communications, technological neutrality and functional equivalence should be considered as general principles underlying the draft provisions. Other general principles might be identified as the work of the Working Group makes progress.

40. Some of the general principles underlying the CISG, such as party autonomy and good faith, may also be relevant to define the notion of general principles contained in the draft provisions. In that respect, the Working Group may wish to consider whether a reference to good faith should be retained in the context of the draft provisions also in light of the fact that it is contained in other UNCITRAL texts on electronic commerce.

“Draft article 5. Party autonomy [and privity of contract]”

“1. The parties may derogate from or vary by agreement the provisions of this law [except articles 1, 2, 4, 5 paragraph 2, 6, 7, [...], 31 and 32].

“2. Such an agreement does not affect the rights of any person that is not a party to that agreement.”

Remarks

41. The Working Group highlighted the importance of party autonomy in the draft provisions (A/CN.9/797, para. 30) and, based on the general applicability of that principle, agreed to identify which draft articles could not be derogated from (A/CN.9/797, para. 32). It is suggested that such identification should be carried out at a later stage of preparation of the draft provisions, pending, in particular, discussion on the provisions relating to third-party service providers.

“Draft article 6. Information requirements

“Nothing in this law affects the application of any rule of law that may require a person to disclose its identity, place of business or other information, or relieves a person from the legal consequences of making inaccurate, incomplete or false statements in that regard.”

42. The Working Group decided to retain draft article 6 with the understanding that it reminds parties of the need to comply with possible disclosure obligations that might exist under other law. (A/CN.9/797 para. 33).

B. Provisions on electronic transactions

43. The Working Group at its forty-eighth session decided to retain draft articles 7-9 as a separate section (A/CN.9/797, para. 34). The Working Group may wish to review its decision in light of the final form of the draft provisions as well as the content of those articles.

“Draft article 7. Legal recognition of an electronic transferable record

“An electronic transferable record shall not be denied legal effect, validity or enforceability on the sole ground that it is in electronic form.”

Remarks

44. Draft article 7 sets forth the principle of non-discrimination. At its forty-ninth session, the Working Group decided to retain draft article 7 in its current form (A/CN.9/804, para. 17, see also A/CN.9/768, para. 39).

“Draft article 8. Writing

“Where the law requires that information should be in writing or provides consequences for the absence of a writing, that requirement is met with respect to the use of an electronic transferable record if the information contained therein is accessible so as to be usable for subsequent reference.”

Remarks

45. Draft article 8 reflects the Working Group’s deliberations at its forty-ninth session (A/CN.9/804, paras. 18-19). It establishes the requirements for the functional equivalence of the written form with respect to information contained in or related to electronic transferable records (A/CN.9/797, para. 37). Draft article 8 refers to the notion of “information” instead of “communication” as not all relevant information might necessarily be communicated (*ibid.*). The general rule on functional equivalence between electronic and written form should be contained in the law on electronic transactions (A/CN.9/797, para. 38).

46. At the forty-ninth session, it was suggested that draft article 8 might not be necessary as the fulfilment of the functional equivalence of the “writing” requirement was implied in the definition of “electronic transferable record” in draft article 3. In response, it was stated that a rule on the “writing” requirement was necessary in light of the other rules on functional equivalence contained in the draft

provisions (A/CN.9/804, para. 18). The Working Group may wish to consider the desirability of maintaining draft article 8 in light of draft articles 10 to 12.

47. In case the draft provisions were to be applicable to electronic transferable records with no paper-based equivalent (see para. 7 above), the Working Group may wish to confirm that the law governing those records should set forth the same requirements contained in draft article 8, i.e. that information should be accessible so as to be usable for subsequent reference (A/CN.9/768, para. 42).

“Draft article 9. Signature

“Where the law requires a signature of a person or provides consequences for the absence of a signature, that requirement is met with respect to the use of an electronic transferable record if:

- (a) A method is used to identify that person and to indicate that person’s intention in respect of the information contained in the electronic record; and
- (b) The method used is either:
 - (i) As reliable as appropriate for the purpose for which the electronic record was generated, in the light of all the relevant circumstances, including any relevant agreement; or
 - (ii) Proven in fact to have fulfilled the functions described in subparagraph (a) above, by itself or together with further evidence.”

Remarks

48. Draft article 9 reflects the Working Group’s deliberations at its forty-ninth session (A/CN.9/804, para. 20). It establishes the requirements for the functional equivalence of “signature” (ibid.) when substantive law either contains an explicit signature requirement or provides consequences for the absence of a signature (implicit signature requirement) (A/CN.9/797, para. 46).

49. Reference in draft article 9, paragraph (b)(i) to “as reliable as appropriate” follows the approach adopted in article 9, paragraph 3 of the Electronic Communications Convention. Such approach to a method “as reliable as appropriate” is distinct from the references contained in other draft articles to a “reliable method”. It is also distinct from the reference to a method “as reliable as appropriate” contained in draft article 18 since that draft article deals with functional equivalence of possession, which is not discussed in the Electronic Communications Convention.

50. The explanatory note to the Electronic Communications Convention provides guidance on the content and operation of that notion of “reliability” in the context of article 9, paragraph 3 of that Convention.⁴ The Working Group may wish to consider whether the guidance provided in that explanatory note provides appropriate guidance in interpreting draft article 9, subparagraph (b)(i).

⁴ United Nations, Explanatory note by the UNCITRAL secretariat on the United Nations Convention on the Use of Electronic Communications in International Contracts, New York, 2007, paras. 161-164.

51. In that respect, the Working Group may also wish to clarify whether the general reliability standard contained in draft article 12 would apply also to draft article 9, subparagraph (b)(i) (A/CN.9/804, para. 20).

52. Another option would be to include in draft article 9 text similar to the requirements set forth in article 6, paragraph 3 of the Model Law on Electronic Signatures, thus providing a specific reliability standard applicable only to draft article 9, subparagraph (b)(i). It should, however, be noted that the Working Group had already agreed that such “two-tier” approach would not be adopted in the draft provisions (A/CN.9/797, para. 40).

Remarks on “original”

53. After noting that the notion of “original” in the context of electronic transferable records was different from that adopted in other UNCITRAL texts (A/CN.9/797, para. 47) and that the main purpose of a functional equivalence rule for that notion in the context of electronic transferable records should be the prevention of multiple claims (A/CN.9/804, para. 21), the Working Group agreed that there was no need to include a functional equivalence rule for “original” in the draft provisions (A/CN.9/804, para. 40). It was explained that the goal of avoiding multiple claims in the context of electronic transferable records could be achieved through the notion of “control”. It was further explained that the notion of “control” could identify both the person entitled to performance and the object of control.

C. Use of electronic transferable records

“Draft article 10. [Paper-based transferable document or instrument] [Operative electronic record] [Electronic transferable record]”

“1. Where the law requires the use of a paper-based transferable document or instrument or provides consequences for its absence, that requirement is met by the use of [an] [one or more than one] electronic record if a reliable method is employed:

(a) To identify that electronic record as the [operative] electronic record to be used as an electronic transferable record and to prevent the unauthorized replication of that electronic transferable record;

(b) To render that electronic record capable of being subject to control during its life cycle; and

(c) To retain the integrity of the electronic transferable record.

[“2. A method satisfies

subparagraph 1(a), if [it meets the requirements set forth in draft articles 12, 18 and 19];

subparagraph 1(b), if [it meets the requirements set forth in draft articles 12, 18 and 19];

subparagraph 1(c), if [it meets the requirements set forth in draft articles 11 and 30].”]

54. Draft article 10 aims to offer a functional equivalence rule for the use of paper-based transferable documents or instruments by setting forth the requirements to be met by an electronic record. The Working Group agreed to introduce draft article 10 in light of its discussions on the notion of uniqueness and its decision to delete a rule on uniqueness (A/CN.9/804, paras. 71 and 74). It was added that resorting to the notion of “control” would make it possible not to refer to the notion of “uniqueness”, which posed technical challenges (A/CN.9/804, para. 38).

55. The words “[one or more than one]” illustrate that in certain registry systems there might be data elements that, taken together, provided the information constituting the electronic transferable record, with no discrete record constituting the electronic transferable record. The Working Group may wish to consider whether to retain those words or whether the definition of “electronic record” in draft article 3 sufficiently covers such possibility (A/CN.9/804, para. 71).

56. The Working Group may also wish to consider whether draft article 12, providing a general reliability standard, would suffice in providing guidance on the reliability standard applicable to draft article 10, subparagraphs 1(a) and (b).

57. The Working Group may wish to consider whether draft article 10, subparagraph 1(c), should be retained in that article or as a paragraph in a separate article on integrity (see draft article 11, paragraph 1). In case draft article 10, subparagraph 1(c) is retained, the Working Group may wish to clarify whether draft article 11, paragraph 2, would provide sufficient guidance on the reliability standard.

58. The Working Group may wish to consider whether draft article 10 should be placed closer to draft article 18 relating to “control” (A/CN.9/804, para. 75).

“Draft article 11. Integrity of an electronic transferable record

“1. A reliable method shall be employed to retain the integrity of an electronic transferable record from its issuance.

“2. For the purposes of [paragraph 1][draft article 10[1](c)]:

(a) The criteria for assessing integrity shall be whether information contained in the electronic transferable record, including any [legally relevant] [authorized] change that arises throughout the life cycle of the electronic transferable record, has remained complete and unaltered [apart from any change which arises in the normal course of communication, storage and display][, and in accordance with draft article 30]; and

(b) 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.”

Remarks

59. Draft article 11 reflects the deliberations of the Working Group at its forty-ninth session (A/CN.9/804, paras. 27-33 and 40). It is inspired by article 8, paragraph 3 of the Model Law on Electronic Commerce.

60. Draft article 11, subparagraph 2(a), indicates that an electronic transferable record retains integrity when any set of information related to legally relevant

changes during its life cycle (as opposed to changes of purely technical nature) remains complete and unaltered (A/CN.9/804, para. 29).

61. The Working Group may wish to consider whether to retain the words “[authorized]” in draft article 11, subparagraph 2(a), taking into consideration the views expressed at its forty-ninth session (A/CN.9/804, paras. 30-32).

62. Regarding how the changes of a technical nature would be treated under draft article 11, guidance should be sought from article 8, subparagraph (3)(a) of the Model Law on Electronic Commerce (A/CN.9/804, para. 33). Consequently, the Working Group may wish to consider adding the following words “[apart from any change which arises in the normal course of communication, storage and display]”.

63. In considering the draft article on amendment, the Working Group agreed that a rule on a reliable method to record legally relevant changes to the information contained in an electronic transferable record should be inserted, in square brackets, for consideration at a future session (A/CN.9/804, para. 86). The Working Group may wish to consider whether the addition of the words “legally relevant” in draft article 11, subparagraph 2(a), would suffice to impose an obligation of reliably recording legally relevant changes to the electronic transferable records.

64. The Working Group may wish to consider whether draft subparagraph 2(b) should be moved to draft article 12, as its first paragraph, so that it would contribute to providing general guidance on the reliability standard. In considering that draft provision, the Working Group may wish to take into consideration article 17, paragraph 4, of the Model Law on Electronic Commerce.

65. The Working Group at its forty-ninth session agreed that reference to draft article 30 on retention of information in an electronic transferable record should be included in this draft article (A/CN.9/804, para. 33). However, the Working Group may wish to consider whether the reference to draft article 11 contained in draft article 30 would suffice, reflecting the fact that the requirements for integrity apply to retention as well. In that case, the Working Group may wish to delete the words “[, and in accordance with draft article 30]”.

“Draft article 12. General reliability standard

“In determining whether, or to what extent, a method is reliable for the purposes of [articles 10, 11, 18 and ...], regard may be had to the following factors:

- (a) Level of assurance of data integrity;
- (b) Ability to prevent unauthorised 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 agreement among the parties;] and
- (g) Any other relevant factor.

Remarks

66. Draft article 12 is inspired by article 10 of the UNCITRAL Model Law on Electronic Signatures, which provides guidance on how to assess trustworthiness of systems, procedures and human resources used by a certification service provider (A/CN.9/797, para. 89).

67. Different views were expressed with respect to the desirability of inserting a general reliability standard in the draft provisions.

68. On the one hand, it was indicated that the draft provisions should provide general guidance on the meaning of reliability and set out the criteria for meeting that standard. It was added that, while party autonomy could suffice to establish reliability standards in closed systems, there still was a need for the draft provisions to set out reliability standards applicable to open systems. It was further mentioned that if a general reliability standard were to be included, it should be drafted in a manner mindful of technological neutrality (A/CN.9/804, para. 43).

69. On the other hand, it was stated that the presence of a general reliability standard could hamper use of electronic transferable records as legal consequences of failure to meet those standards were not clear. It was further indicated that caution should be exercised so as not to make the draft provisions untenable in practice. It was also noted that there was no need for a general reliability standard as each draft article containing a reliability standard should include in itself a provision specific to that context (A/CN.9/804, para. 42).

70. At the Working Group's forty-ninth session, the inclusion of additional factors to assess reliability was suggested. Those factors related to: quality of staff; sufficient financial resources and liability insurance; existence of a notification procedure for security breaches and of reliable audit trails (A/CN.9/804, paras. 44-45).

71. Draft subparagraph (f) was inserted to highlight the relevance of any parties' agreement when assessing the reliability of the method.

72. However, the view was also expressed that the existing and newly-suggested reliability factors were too detailed and that the provision was regulatory in nature. It was added that the adoption of such detailed requirements could impose excessive costs on business and ultimately hamper electronic commerce. It was further noted that those requirements could lead to increased litigation based on complex technical matters. It was suggested that a reference to reliable methods based on internationally accepted standards and practices should instead be inserted in the draft provisions (A/CN.9/804, para. 46).

73. In conclusion, the Working Group agreed to further consider draft article 12 as a possible general rule on system reliability and in connection with provisions relating to third-party service providers.

74. The Working Group may also wish to discuss whether draft article 12, subparagraph (a), should refer to data integrity in the system, to integrity of the electronic transferable record or to both, in light also of draft article 11.

75. The Working Group may also wish to discuss whether draft article 12, subparagraph (b), should explicitly refer to unauthorized access and use of the

system or of the method employed to establish control, in light also of draft article 18.

76. The Working Group also agreed to consider the adoption of specific standards for each draft provision referring to a reliable method (A/CN.9/804, para. 49).

77. The following draft articles refer to a specific standard for the assessment of reliability: draft article 9 on signatures, draft article 11 on integrity and draft articles 18 and 19 on possession and control. The Working Group may wish to confirm that the general reliability standard contained in draft article 12 would also apply to those draft articles.

78. Draft articles 10 on the functional equivalent of paper-based transferable documents or instruments, 24 on amendment, 27 on division and consolidation, 28 on termination and 29 on use for security right purposes contain a reference to the use of a reliable method in performing operations related to the life cycle of an electronic transferable record. The Working Group may wish to confirm whether draft article 12 would be sufficient to assess the reliability of the various methods referred to in those draft articles, or if additional guidance should be sought in the standards contained in draft articles 18 and 19.
