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Draft Model Law on Electronic Transferable Records

Note by the Secretariat

Addendum

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II. Draft Model Law on Electronic Transferable Records

C. Use of electronic transferable records

“Draft article 9. Transferable document or instrument

“1. Where the law requires a transferable document or instrument, that requirement is met by an electronic record if:

(a) The electronic record contains the information that would be required to be contained in a transferable document or instrument; and

(b) A reliable method is used:

(i) To identify that electronic record as the electronic transferable record;

(ii) To render that electronic record capable of being subject to control from its creation until it ceases to have any effect or validity; and

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

“2. The criterion for assessing integrity shall be whether information contained in the electronic transferable record, including any authorized change that arises from its creation until it ceases to have any effect or validity, has remained complete and unaltered apart from any change which arises in the normal course of communication, storage and display.”

Remarks

1. Draft article 9 reflects the deliberations of the Working Group at its fifty-third session (A/CN.9/869, paras. 50-68). At that session the Working Group agreed that (i) the title of draft article 9 should refer to “transferable document or instrument” to be in line with the drafting style used for other articles providing for a functional equivalent in the draft Model Law; and (ii) subparagraph 1(a) should refer to a transferable document or instrument without any qualifier such as “equivalent” to avoid uncertainty on the understanding that an electronic transferable record should contain the same information as the transferable document or instrument of the same type.

2. With regard to subparagraph 1(b)(i), the Working Group confirmed that paragraph 1 was based on both the “singularity” and the “control” approaches. The Working Group also agreed that the use of the word “the” to identify the electronic transferable record was adequate in the English, French and Spanish languages (A/CN.9/869, paras. 54 and 58).

3. The Working Group may wish to note that, upon consultation with the relevant translation units, adequate translation for subparagraph 1(b)(i) have been sought in the Arabic, Chinese and Russian languages.

4. With regard to paragraph 1(b)(ii), the Working Group agreed that the reference to a reliable method therein was appropriate and that it referred to the reliability of the system used to render the electronic record capable of being subject to control (A/CN.9/869, para. 64).

5. With regard to paragraph 2, the Working Group agreed that it related to system integrity and that therefore reference should be made to “authorized” changes (A/CN.9/869, paras. 61-62). The Working Group also agreed to delete the second sentence of paragraph 2 referring to the assessment of the standard of reliability as redundant, since it repeated in part draft article 11, subparagraph (1)(a) on the assessment of the reliability standard, which is applicable also to draft article 9 (A/CN.9/869, paras. 65-66).

Comments

6. Article 9 provides a functional equivalence rule for the use of transferable documents or instruments by setting forth the requirements to be met by an electronic record. It aims at preventing the possibility of multiple requests to perform the same obligation by combining two approaches, i.e. “singularity” and “control” (A/CN.9/834, para. 86). The reliability of the method referred to in article 9 shall be assessed according to the general reliability standard contained in article 11 (A/CN.9/863, paras. 66 and 73).

7. Article 9 represents the outcome of discussions originating from the notion of “uniqueness”. Uniqueness of a transferable document or instrument aims to prevent the circulation of multiple documents or instruments relating to the same performance (A/CN.9/WG.IV/WP.118, para. 39) and thus to avoid multiple claims (A/CN.9/761, para. 33; A/CN.9/768, para. 51). Providing a guarantee of uniqueness (or singularity) in an electronic environment equivalent to possession of a document of title or negotiable instrument has long been considered a peculiar challenge (A/CN.9/WG.IV/WP.90, para. 95; A/CN.9/WG.IV/WP.115, paras. 12-18).

8. Uniqueness is a relative notion that poses technical challenges in an electronic environment, as providing an absolute guarantee of non-replicability may not be technically feasible. In fact, the notion of uniqueness poses challenges also with respect to transferable documents or instruments, since paper does not provide an absolute guarantee of non-replicability. However, centuries of use of paper in business transactions have provided sufficient information to commercial operators for an assessment of the risks associated with the use of that medium while practices on the use of electronic transferable records are not yet equally well-established.

9. With respect to electronic transferable records, resorting to the notions of “singularity” and “control” suffices to provide reliable assurance that the debtor will not be exposed to multiple requests for performance (A/CN.9/804, paras. 38, 71 and 74; see also A/CN.9/797, paras. 48 and 50 and A/CN.9/869, para. 55).

10. The “singularity” approach requires reliable identification of the electronic transferable record that entitles its holder to request performance of the obligation indicated in it, so that multiple claims of the same obligation would be avoided, while the “control” approach focuses on the use of a reliable method to identify the person in control of the electronic transferable record (A/CN.9/834, para. 86; A/CN.9/869, para. 56).

11. One effect of the adoption of the notions of “singularity” and “control” in the Model Law is the prevention of unauthorized replication of an electronic transferable record by the system (see also A/CN.9/834, paras. 105-107).

Subparagraph 1(a)

12. Subparagraph 1(a) states that the electronic record should contain the information required to be in a transferable document or instrument. Since that information is contained in writing in a transferable document or instrument, its inclusion in an electronic transferable record must comply with article 7 of the Model Law. The definition of “electronic record” contained in article 2 of the Model Law clarifies that the electronic record may, but does not need to have a composite nature (see A/CN.9/WG.IV/WP.139, paras. 38-39).

13. The electronic transferable record must contain the information identifying it as the functional equivalent of a transferable document or instrument. That identification is necessary also to determine the substantive law applicable to the electronic transferable records (e.g., the law applicable to a bill of lading, rather than the law applicable to promissory note).

14. A law that does not contain a provision akin to subparagraph 1(a) of article 9, but sets forth directly the information requirements to be contained in an electronic transferable record, is likely to provide for electronic transferable records that are not functionally equivalent to transferable documents or instruments, but exist only in an electronic environment.

15. Accordingly, an electronic transferable record existing only in electronic form would not satisfy the requirements of article 9 and would, thus, not fall under the definition of electronic transferable record contained in article 2. Namely, while an electronic transferable record existing only in electronic form could satisfy other requirements set forth in the Model Law, that record would define autonomously the information requirements and therefore would not satisfy the requirements of article 9, paragraph 1(a) (A/CN.9/869, para. 67).

16. Subparagraph 1(a) does not contain any qualifier as “equivalent”, “corresponding” or “as having the same purpose” given that under that provision an electronic transferable record must indicate the same information required for a transferable document or instrument of the same type. Insertion of a further qualifier might create uncertainty (A/CN.9/869, paras. 50-51).

Subparagraph 1(b)(i)

17. Subparagraph 1(b)(i) sets forth the requirement to identify an electronic record as the record containing the information necessary to establish that record as the electronic transferable record. That requirement implements the “singularity” approach (A/CN.9/834, para. 86; A/CN.9/869, para. 52).

18. The purpose of the provision is to identify the electronic transferable record as opposed to other electronic records that are not transferable. Identification alone suffices to express the singularity approach (A/CN.9/869, paras. 52, 55 and 59; A/CN.9/828, para. 32; see also A/CN.9/WG.IV/WP.137, para. 57). The article “the” in the English, French and Spanish languages suffices to point at the singularity approach, thus avoiding the use of any qualifier and related challenges (A/CN.9/869, para. 58). Other language versions are intended to convey the same notion.

19. Unlike certain domestic legislation,¹ subparagraph 1(b)(i) does not refer to a qualifier such as “authoritative”, “operative” or “definite” to identify the electronic record as the electronic transferable record (A/CN.9/869, paras. 52, 57-60; A/CN.9/834, paras. 101-104; A/CN.9/828, paras. 32). The reason for that omission is that a qualifier could create interpretative challenges, especially in certain languages, could be interpreted as referring to the notion of “uniqueness” that had been abandoned, and could ultimately foster litigation.

Subparagraph 1(b)(ii)

20. Subparagraph 1(b)(ii) sets forth the requirement that the electronic transferable record should be capable of being controlled from its creation until it ceases to have any effect or validity, particularly in order to allow for its transfer. That requirement implements the “control” approach (A/CN.9/834, para. 86; A/CN.9/869, para. 64).

21. The provision takes into account the possibility that an electronic transferable record might not necessarily be actually subject to control (A/CN.9/804, para. 61). This could happen, for instance, when a token-based electronic transferable record is lost.

22. The reference to a reliable method with respect to subparagraph 1(b)(ii) refers to the reliability of the system used to render the electronic record capable of being subject to control (A/CN.9/869, para. 64).

Subparagraph 1(b)(iii)

23. The notion of integrity is an absolute one (A/CN.9/863, para. 42). It refers to a fact, and as such, is objective, i.e. either an electronic transferable record retains integrity or not. The reference to the reliable method used to retain integrity is relative or subjective and the assessment of that method is subject to the general reliability standard contained in article 11 (A/CN.9/869, para. 63).

Paragraph 2

24. Paragraph 2 sets forth a provision on the assessment of the notion of integrity (A/CN.9/828, paras. 48 and 49). It indicates that an electronic transferable record retains integrity when any set of information related to authorized changes (as opposed to changes of purely technical nature) remains complete and unaltered from the time of the creation of the electronic transferable record until it ceases to have any effect or validity (A/CN.9/804, para. 29). It is inspired by article 8, paragraph 3, of the UNCITRAL Model Law on Electronic Commerce (A/CN.9/828, para. 45). However, it should be noted that article 8, paragraph 3(a) of the Model Law on Electronic Commerce refers to a notion of integrity with respect to the use of the notion of “original” that may be more appropriate for electronic contracting. On the other hand, the notion of integrity contained in article 9, paragraph 2 of the Model Law necessarily takes into account the fact that the life cycle of electronic transferable records implies a number of events that need to be accurately reflected in those records.

25. “Authorized” changes are those changes permitted by the system designers throughout the life cycle of an electronic transferable record (A/CN.9/828, para. 44;

¹ Section 7-106 of the Uniform Commercial Code (UCC).

A/CN.9/834, paras. 27-28). The term “authorized” does not refer to whether the changes are legitimate, which would introduce a standard presupposing a legal assessment under substantive law (A/CN.9/804, para. 32). For instance, unauthorized changes would be those performed by a hacker who must compromise the integrity of the electronic transferable record in order to have access to it (A/CN.9/869, paras. 61-62).

References to preparatory work

A/CN.9/WG.IV/WP.122, paras. 15-19; A/CN.9/768, paras. 48-56, 75, 76 and 85;

A/CN.9/WG.IV/WP.124, paras. 35-39; A/CN.9/797, paras. 47-60;

A/CN.9/WG.IV/WP.128, paras. 42-55; A/CN.9/804, paras. 21-40; paras. 70-75;

A/CN.9/WG.IV/WP.130, paras. 54-65;

A/CN.9/828, paras. 31-40, paras. 42-49;

A/CN.9/WG.IV/WP.132, paras. 56-64; A/CN.9/834, 21-30 and 85-90 and 92; 99-108;

A/CN.9/WG.IV/WP.135, paras. 68-80;

A/CN.9/WG.IV/WP.137, paras. 52-65; A/CN.9/869, paras. 50-68.

“Draft article 10. Control

“1. Where the law requires the possession of a transferable document or instrument, that requirement is met with respect to an electronic transferable record if a reliable method is used:

(a) To establish exclusive control of that electronic transferable record by a person; and

(b) To identify that person as the person in control.

“2. Where the law requires or permits transfer of possession of a transferable document or instrument, that requirement is met with respect to an electronic transferable record through the transfer of control over the electronic transferable record.”

Remarks

26. Draft article 10 reflects the Working Group’s deliberations at its fifty-third session (A/CN.9/869, paras. 103-110) to (i) place the draft article consecutively after draft article 9 in view of their logical relation; (ii) use as title the word “control” since it refers to a particularly relevant notion in the draft Model Law and best highlights its content; and (iii) use the word “identify” in subparagraph 1(b) in light of its clear meaning.

Comments

27. Article 10 provides a functional equivalence rule for the possession of a transferable document or instrument. Functional equivalence of possession is achieved when a reliable method is employed to establish control of that record by a person and to identify the person in control.

28. The notion of “control” is closely related to article 9 subparagraph (b)(ii) (A/CN.9/869, para. 103) and actually implements the requirement contained in that subparagraph. “Control” could refer to control of the information relating to the electronic transferable record (“logical control”) or to control of the physical object containing that information (“physical control”), depending on the system used to manage the electronic transferable record (A/CN.9/768, para. 78).

29. The notion of “control” is not defined in the Model Law since it is the functional equivalent of the notion of “possession”, which, in turn, may vary in each jurisdiction (A/CN.9/834, para. 83).

30. Both control and possession are factual. In line with the general principle that the Model Law does not affect substantive law, the notion of control does not affect or limit the legal consequences arising from possession. Consequently, parties may agree on the modalities for the exercise of possession, but may not modify the notion of possession itself (A/CN.9/863, para. 101).

31. The title of article 10 refers to “control” and not to “possession”, thus departing from the naming style of other articles of the Model Law, since the notion of “control” is particularly relevant in the Model Law. While a notion of “control” may exist in national legislation,² the notion of “control” contained in article 10 needs to be interpreted autonomously in light of the international character of the Model Law.

Paragraph 1

32. The reliability of the method referred to in article 10 shall be assessed according to the general reliability standard contained in article 11 (A/CN.9/863, paras. 66 and 73).

Subparagraph 1(a)

33. Subparagraph 1(a) refers to “exclusive” control for reasons of clarity (A/CN.9/834, para. 93), since the notion of “control”, similarly to that of “possession”, implies exclusivity in its exercise (A/CN.9/797, para. 74). Yet, control, like possession, could be exercised concurrently by more than one person in control. The concept of “control” does not refer to “legitimate” control, since this is a matter of substantive law (A/CN.9/797, para. 76).

34. Although both the notion of “control” and the notion of “singularity” aim at preventing multiple requests of performance of the same obligation, the two notions operate independently and should be distinguished. For instance, it is possible to conceive exclusive control over a multiple record, i.e. a record that does not meet the requirements of singularity. Conversely, it is also possible to conceive non-exclusive control over a single record (A/CN.9/804, para. 69; see also A/CN.9/797, paras. 48-50; and paragraphs 9-10 above).

Subparagraph 1(b)

35. Subparagraph 1(b) requires to reliably identify the person in control as the holder of the electronic transferable record (A/CN.9/768, paras. 77 and 85). The

² E.g., Section 7-106 of the Uniform Commercial Code.

person in control of an electronic transferable record is in the same legal position as the holder of an equivalent transferable document or instrument.

36. The reference to the “person in control” of the electronic transferable record in subparagraph 1(b) does not imply that the person is also the rightful person in control of that record as this is for substantive law to determine (A/CN.9/828, para. 61). Further, the reference to the person in control does not exclude the possibility of having more than one person exercising control (A/CN.9/828, para. 63) or of attributing selectively control on one electronic transferable record to multiple entities on the basis of the legal rights attributed to each entity (e.g., title to property of goods, security interests, etc.).

37. The person in control may be a natural or a legal person (A/CN.9/869, paras. 109-110) or other entity able to possess an electronic transferable record under substantive law. The use of the services of a third party to exercise exclusive control does not affect exclusivity of control or imply that the third party service provider or any other intermediary is a person in control (A/CN.9/804, para. 59).

38. The requirement to identify the person in control does not imply that an electronic transferable record in itself shall contain the identification of the person in control. Rather, that requirement demands that the method or system employed to establish control as a whole shall perform the identification function (A/CN.869, paras. 106-108; A/CN.9/828, para. 63). Moreover, identification should not be understood as implying an obligation to name the person in control, as the Model Law allows for the issuance of electronic transferable records to bearer, which implies anonymity (A/CN.9/828, para. 51).

39. Certain electronic transferable records management systems, such as those based on distributed ledgers, may identify the person in control by referring to pseudonyms rather than to real names. That identification, and the possibility to link pseudonym and real name, if need be, would satisfy the requirement to identify the person in control. In any case, anonymity for commercial law purposes may not preclude the possibility of identifying the person in control for other purposes, such as law enforcement.

40. Article 10 will also assist in carrying out those necessary steps occurring in the life cycle of the electronic transferable record that require demonstration of control of that record. For instance, the notion of “presentation” in the paper environment relies on demonstration of possession of a transferable document or instrument as its core element. That demonstration may be given by identifying the person in control. In practice, the electronic transferable records management system may rely on the requirement to identify the person in control contained in article 10 when dealing with presentation of a record. Accordingly, the Model Law does not contain a separate provision on presentation (A/CN.9/863, paras. 27-36).

Paragraph 2

41. Transferable documents or instruments, and therefore also electronic transferable records, may circulate by delivery and by endorsement. Paragraph 2 sets forth that transfer of control over an electronic transferable record is the functional equivalent of delivery, i.e. transfer of possession, of a transferable document or instrument (A/CN.9/834, paras. 31-33; see also the comments on article 16 on endorsement).

42. Paragraph 2 includes the words “or permits” in order to clarify its application to cases in which the law merely permits, but does not require transfer of possession of a transferable document or instrument.

43. The delivery of a transferable document or instrument may be a necessary step in the life cycle of that document or instrument. For instance, the request for delivery of goods typically requires surrendering a bill of lading. The Model Law does not contain specific provisions on surrender as paragraph 2, on transfer of control as functional equivalent of delivery, would apply also to those cases.

References to preparatory work

A/CN.9/761, paras. 24-25, 38-41 and 50-58;

A/CN.9/WG.IV/WP.122, para. 14; paras. 26-28; A/CN.9/768, paras. 45-47 and 75-85;

A/CN.9/WG.IV/WP.124/Add.1, paras. 1-2 and 3-9; A/CN.9/797, paras. 66 and 74-90;

A/CN.9/WG.IV/WP.128/Add.1, paras. 11-20; A/CN.9/804, paras. 51-70;

A/CN.9/WG.IV/WP.130/Add.1, paras. 20-28; A/CN.9/828, paras. 50-67;

A/CN.9/WG.IV/WP.132/Add.1, paras. 24-34; A/CN.9/834, paras. 31-33 and 83-94;

A/CN.9/WG.IV/WP.135/Add.1, paras. 19-28; A/CN.9/863, paras. 27-36 and paras. 99-102;

A/CN.9/WG.IV/WP.137/Add.1, paras. 23-30; A/CN.9/869, paras. 103-110.

“Draft article 11. General reliability standard

“For the purposes of articles [8, 9, 10, 11, 17, 18, 19] 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 relevant to 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 security 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 standards; or

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

Remarks

44. Draft article 11 reflects the deliberations of the Working Group at its fifty-third session (A/CN.9/869, paras. 69-78) to (i) replace the word “quality” in subparagraph (a)(iv) with the word “security” since quality did not lend itself easily to an objective assessment and the notion of security is more directly relevant for assessing the reliability of the method; (ii) delete the words “agreed to” in subparagraph (b) since the provision does not relate only to functions that had been agreed upon contractually; and (iii) delete the second paragraph referring to party agreement with regard to the purposes of assessing reliability between the parties on the understanding that the draft Model Law does not prevent parties from contractually allocating some liability.

45. The Working Group may wish to consider whether subparagraph (a)(vi) should refer to the reliability of the system, of the methods used in the system, or of both. In that respect, the Working Group may wish to confirm that the term “system” is used in the Model Law to refer to the electronic transferable records management system, upon the understanding that reference to that system does not imply the existence of a system administrator or other form of centralized control. In that line, the Working Group may also wish to consider whether subparagraph (a)(iv) should refer to “hardware and software used in the system”.

Comments

46. Article 11 provides a consistent and technology neutral general standard on the assessment of reliability that applies whenever a provision of the Model Law requires the use of a “reliable method” for the fulfilment of its functions (A/CN.9/863, para. 44).

47. Article 11 aims to increase legal certainty by indicating elements that may be relevant in assessing reliability (A/CN.9/804, para. 47). The list of circumstances contained in article 11 is not exhaustive and does not prevent the parties from allocating liability contractually (see also paras. 62-63 below). The general reliability standard is applicable to all electronic transferable records management system providers and not only to third-party service providers (A/CN.9/804, para. 48).

48. Though the provision aims at providing guidance on the assessment of the reliability of the electronic transferable records management system in case of dispute (“ex post” reliability assessment), its content will necessarily also influence the design of the system (“ex ante” reliability assessment) (A/CN.9/863, para. 44) since system designers pursue offering reliable systems.

49. Each provision of the Model Law referring to the use of a reliable method aims at fulfilling a different function (A/CN.9/863, para. 54). Accordingly, the reference to “the purposes of articles” contained in the chapeau of article 11 aims to clarify that the assessment of the reliability of each relevant method should be carried out separately in light of the function specifically pursued with the use of that method (A/CN.9/863, para. 39). That approach provides needed flexibility when assessing the application of the reliability standard in practice (A/CN.9/828, para. 47) as it allows customizing the reliability assessment to each function fulfilled by the system.

Subparagraph (a)

50. Subparagraph (a) contains a list of circumstances to assist in determining reliability. The words “which may include” clarify that the list is not exhaustive and has an illustrative nature only (A/CN.9/863, paras. 46 and 66). The words “all relevant circumstances” include the purpose for which the information contained in the electronic transferable record was generated (A/CN.9/863, para. 67).

51. The list of circumstances aims at achieving a balance between providing guidance on the assessment of reliability and imposing requirements that may result in excessive costs on business, ultimately hampering electronic commerce and leading to increased litigation on complex technical matters (A/CN.9/863, para. 46). Additional possibly relevant circumstances include: 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).

“operational rules”

52. Subparagraph (a)(i) refers to “operational rules” that are usually contained in an operating manual whose application could be monitored by an oversight body and that, as such, may not have a purely contractual nature. The words “relevant to the assessment of” clarify that only operational rules regarding the reliability of the system, and not operational rules in general, should be considered (A/CN.9/863, paras. 57 and 68).

“assurance of data integrity”

53. Subparagraph (a)(ii) refers to the “assurance of data integrity” as an absolute notion, since data integrity cannot be expressed by reference to a level (A/CN.9/863, para. 42). Though the notion of “integrity” of the electronic transferable record is already contained in article 9, it is included also as an element in the assessment of the general reliability standard. More precisely, the reference to integrity contained in article 10 is relevant also to articles that do not mention integrity when integrity is in fact relevant to assess the reliability of the method used and, ultimately, the achievement of functional equivalence (A/CN.9/863, paras. 69 and 70).

“prevent unauthorized access to and use of the system”

54. The circumstance refers to the ability to prevent access to and use of the system by third parties not authorized to do so. In that respect, it should be noted that the notion of integrity in the Model Law refers to “authorized” changes. A reliable method shall therefore prevent unauthorized changes. Moreover, the notion of control is based on exclusivity which presupposes the ability to exclude third parties without authorized access to the system.

“security of hardware and software systems”

55. Reference to “security of hardware and software systems” is included in the list of criteria for the assessment of the general reliability standard for electronic transferable records, since security of hardware and software systems has a direct impact on the reliability of the method used. That reference is found also in article 10, subparagraph (b) of the UNCITRAL Model Law on Electronic

Signatures, which refers to the “quality of hardware and software systems” as one of the factors to be regarded for the determination of trustworthiness of any systems, procedures and human resources utilized by a certification service provider. The term “security” is used in subparagraph (a)(iv) instead of “quality” since the notion of security lends itself more easily to an objective assessment of the method used (A/CN.9/869, para. 69).

“regularity and extent of audit by an independent body”

56. The existence of regular accurate audits carried out by an independent body may be seen as evidence of validation of the reliability of the system by a third party. Similarly, article 10, subparagraph (e) of the UNCITRAL Model Law on Electronic Signatures refers to the “regularity and extent of audit by an independent body” as one of the factors to be considered for the determination of trustworthiness of any systems, procedures and human resources utilized by a certification service provider.

“declaration by a supervisory body, an accreditation body or a voluntary scheme regarding the reliability of the method”

57. The criteria of “regularity and extent of audit by an independent body” is inspired by article 10, subparagraph (f) of the UNCITRAL Model Law on Electronic Signatures, which refers to the “declaration by the State, an accreditation body or the certification service provider regarding compliance with or existence of the foregoing” as one of the factors to be regarded for the determination of trustworthiness of any systems, procedures and human resources utilized by a certification service provider. A declaration by such body may guarantee a certain level of objectivity in the assessment of the reliability of the method.

“Any applicable industry standard”

58. The reference to “any applicable industry standard” stems from a suggestion to refer to internationally accepted standards and practices to avoid increased litigation based on complex technical matters (A/CN.9/804, para. 46) and to allow flexibility in technology choice while providing guidance, in light also of the fact that electronic transferable records management systems are likely to be designed and maintained by highly-specialized professionals (A/CN.9/863, para. 56).

59. During the discussions on article 11, the term “any applicable industry standard” was preferred to “industry best practices” since the former can be more easily ascertained (A/CN.9/863, para. 71). Applicable industry standards should preferably be internationally recognized (A/CN.9/863, para. 56). In fact, the use of international standards may promote the emergence of a common notion of reliability across jurisdictions. Reference to industry standards shall not be interpreted so as to violate the principle of technology neutrality (A/CN.9/863, para. 71).

Subparagraph (b)

60. Subparagraph (b) provides a “safety clause” with the purpose of preventing frivolous litigation by validating methods that have in fact achieved their function regardless of any assessment of their reliability (A/CN.9/863, para. 43). It refers to

the fulfilment of the function in the specific case under dispute and does not aim at predicting future reliability based on past performance of the method (A/CN.9/863, para. 51). The provision may operate with respect to any of the functions pursued with the use of electronic transferable records (A/CN.9/869, para. 71). A similar mechanism is contained in article 9, subparagraph (3)(b)(ii), of the Electronic Communications Convention, relating to the functional equivalence of electronic signatures.

61. In practice, the fact that the method used has in fact achieved the function pursued with its use will prevent any discussion on the assessment of its reliability according to subparagraph (b).

Party autonomy

62. The Model Law does not contain an explicit reference to the relevance of an agreement of the parties when assessing reliability in article 11. That omission is due to the desire to set forth an objective reliability standard and therefore not to make it dependent on party autonomy. In particular, the inclusion of a reference to party autonomy could have been read as: (a) introducing different standards for the assessment of reliability whose application would depend on the parties involved; (b) leading to inconsistent findings in respect of the validity of the electronic transferable record, and (c) circumventing substantive law, especially provisions of mandatory application, and ultimately affect third parties. Hence, party autonomy with respect to the assessment of reliability is limited to allocation of liability under the limits set forth in applicable law (A/CN.9/869, para. 75; see also A/CN.9/863, paras. 40 and 59).

63. The relevance of party agreements may be particularly significant in the context of closed systems or when referring to industry standards, since those agreements often contain useful guidance on technical details and may promote technological innovation within the limits of mandatory substantive law (A/CN.9/869, para. 77; see also A/CN.9/863, paras. 58 and 74).

References to preparatory work

A/CN.9/WG.IV/WP.128, paras. 56-58; A/CN.9/WG.IV/WP.128/Add.1, paras. 19-20;
A/CN.9/804, paras. 41-49 and 63;
A/CN.9/WG.IV/WP.130, paras. 66-78; A/CN.9/828, paras. 47-49
A/CN.9/WG.IV/WP.132, paras. 65-77;
A/CN.9/WG.IV/WP.135, paras. 81-95; A/CN.9/863, paras. 37-76;
A/CN.9/WG.IV/WP.137, paras. 66-77; A/CN.9/869, paras. 69-78.