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REPORT OF THE WORKING GROUP ON ELECTRONIC DATA INTERCHANGE (EDI) ON THE WORK OF ITS TWENTY-EIGHTH SESSION (Vienna, 3-14 October 1994)

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INTRODUCTION

1. At its twenty-fourth session (1991), the Commission agreed that the legal issues of electronic data interchange (EDI) would become increasingly important as the use of EDI developed and that the Commission should undertake work in that field. The Commission agreed that the matter needed detailed consideration by a Working Group. [1/]

2. Pursuant to that decision, the Working Group on International Payments devoted its twenty-fourth session to identifying and discussing the legal issues arising from the increased use of EDI. The report of that session of the Working Group suggested that the review of legal issues arising out of the increased use of EDI had demonstrated that among those issues some would most appropriately be dealt with in the form of statutory provisions (A/CN.9/360, para. 129). As regards the possible preparation of a standard communication agreement for world-wide use in international trade, the Working Group decided that, at least currently, it was not necessary for the Commission to develop a standard communication agreement. However, the Working Group noted that, in line with the flexible approach recommended to the Commission concerning the form of the final instrument, situations might arise where the preparation of model contractual clauses would be regarded as an appropriate way of addressing specific issues (ibid., para. 132). The Working Group reaffirmed the need for close cooperation between all international organizations active in the field. It was agreed that the Commission, in view of its universal membership and general mandate as the core legal body of the United Nations system in the field of international trade law, should play a particularly active role in that respect (ibid., para. 133).

3. At its twenty-fifth session (1992), the Commission considered the report of the Working Group on International Payments on the work of its twenty-fourth session (A/CN.9/360). In line with the suggestions of the Working Group, the Commission agreed that there existed a need to investigate further the legal issues of EDI and to develop practical rules in that field. It was agreed, along the lines suggested by the Working Group, that, while some issues would most appropriately be dealt with in the form of statutory provisions, other issues might more appropriately be dealt with through model contractual clauses. After discussion, the Commission endorsed the recommendation contained in the report of the Working Group (ibid., paras. 129-133), reaffirmed the need for active cooperation between all international organizations active in the field and entrusted the preparation of legal rules on EDI to the Working Group on International Payments, which it renamed the Working Group on Electronic Data Interchange. [2/]

4. At its twenty-sixth session (1993), the Commission had before it the report of the Working Group on Electronic Data Interchange on the work of its twenty-fifth session (A/CN.9/373). The Commission noted that the Working Group had started discussing the content of a uniform law on EDI and expressed the hope that the Working Group would proceed expeditiously with the preparation of that text. [3/]

5. The Working Group on Electronic Data Interchange held its twenty-seventh session in New York, from 28 February to 11 March 1994. At that session, the Working Group discussed draft articles 1 to 10 as set forth in a note by the Secretariat (A/CN.9/WG.IV/WP.60). The Secretariat was requested to prepare, on the basis of the deliberations and conclusions of the Working Group, a set of revised articles 1 to 10, with possible variants, on the issues discussed.

6. At its twenty-seventh session (1994), the Commission had before it the reports of the Working Group on the work of its twenty-sixth and twenty-seventh sessions (A/CN.9/387 and A/CN.9/390). As to the time schedule for completion of the current work of the Working Group, the view was expressed that it might be difficult to complete the current work within one year and submit the model statutory provisions to the Commission at its next session since a number of issues, such as scope of

application and party autonomy, still remained to be resolved, and that, at any rate, the Commission might not have sufficient time available on the agenda of its next session to consider the rules. The prevailing view, however, was that a draft set of basic, "core" provisions could be completed by the Working Group at its twenty-eighth or twenty-ninth session, in particular since it had been decided that the relationships between EDI users and public authorities, as well as consumer transactions, should not be the focus of the model statutory provisions (A/CN.9/390, para. 21). It was pointed out that further provisions could be added at a later stage, in particular since that was an area of rapid technological development. [4/]

7. The Working Group on Electronic Data Interchange, which was composed of all States members of the Commission, held its twenty-eighth session at Vienna, from 3 to 14 October 1994. The session was attended by representatives of the following States members of the Working Group: Argentina, Austria, Canada, Chile, China, Costa Rica, Denmark, Ecuador, Egypt, France, Germany, Hungary, India, Iran (Islamic Republic of), Japan, Mexico, Morocco, Poland, Russian Federation, Saudi Arabia, Singapore, Spain, Sudan, Thailand, Togo, United Kingdom of Great Britain and Northern Ireland, United States of America and Uruguay.

8. The session was attended by observers from the following States: Algeria, Australia, Bosnia and Herzegovina, Brazil, Colombia, Czech Republic, Finland, Indonesia, Peru, Romania, Sweden, Switzerland, Turkey, Ukraine and Venezuela.

9. The session was attended by observers from the following international organizations: Inter-Agency Procurement Services Office, United Nations Industrial Development Organization (UNIDO), Hague Conference on Private International Law, Fédération Bancaire de la Communauté Européenne, Federación Latinoamericana de Bancos (FELABAN), International Chamber of Commerce (ICC), Islamic Centre for Development of Trade (Organization of the Islamic Conference), League of Arab States, Office Central des Transports Internationaux Ferroviaires (O.C.T.I.) and Society for Worldwide Interbank Financial Telecommunication (S.W.I.F.T.).

10. The Working Group elected the following officers:

Chairman: Mr. José-María Abascal Zamora (Mexico);

Rapporteur: Mr. Abdolhamid Faridi Araghi (Islamic Republic of Iran).

11. The Working Group had before it the following documents: provisional agenda (A/CN.9/WG.IV/WP.61), a note by the Secretariat containing a revised draft of uniform rules on the legal aspects of electronic data interchange (EDI) and related means of data communication (A/CN.9/WG.IV/WP.60) and a note by the Secretariat containing a newly revised draft of articles 1 to 10 of model statutory provisions on the legal aspects of electronic data interchange (EDI) and related means of data communication (A/CN.9/WG.IV/WP.62).

12. The Working Group adopted the following agenda:

1. Election of officers;
2. Adoption of the agenda;
3. Preparation of model statutory provisions on the legal aspects of electronic data interchange (EDI) and related means of data communication;
4. Other business;
5. Adoption of the report.

I. DELIBERATIONS AND DECISIONS

13. The Working Group discussed draft articles 11 to 15 and draft articles 1 to 10 as set forth in the notes by the Secretariat (A/CN.9/WG.IV/WP.60 and A/CN.9/WG.IV/WP.62, respectively).

14. As the Working Group concluded its deliberation of the draft articles, a drafting group established by the Secretariat proposed a draft revised version of the model statutory provisions reflecting the deliberations and decisions that had taken place. As a result of a decision taken by the Working Group (see below, para. 77), the revised text was in the form of a draft model law (hereinafter referred to as "the draft Model Law"). The deliberations and conclusions of the Working Group are set forth below in chapter II. The text of the draft Model Law as prepared by the drafting group and, with some modifications, approved by the Working Group is set forth in the annex to this report.

II. CONSIDERATION OF DRAFT MODEL STATUTORY PROVISIONS ON THE LEGAL ASPECTS OF ELECTRONIC DATA INTERCHANGE (EDI) AND RELATED MEANS OF DATA COMMUNICATION

CHAPTER III. COMMUNICATION OF DATA [RECORDS]

Article 11. Acknowledgement of receipt

15. The text of draft article 11 as considered by the Working Group was as follows:

"(1) Where, on or before sending a data [message], or by means of that data [message], the [sender] [originator] has requested an acknowledgement of receipt, but the [sender] [originator] has not requested that the acknowledgement be in a particular form, any request for an acknowledgement may be satisfied by any communication or conduct of the addressee sufficient to indicate to the [sender] [originator] that the message has been received.

"(2) If, on or before transmitting a data message, or by means of that data message, the [sender] [originator] has requested an acknowledgement of receipt [and stated that the data message is to be of no effect until an acknowledgement is received], the addressee may not rely on the message, for any purpose for which it might otherwise seek to rely on it, until an acknowledgement has been received by the [sender] [originator].

"(3) If the [sender] [originator] does not receive the acknowledgement of receipt within the time limit [agreed upon, requested or within reasonable time], it may, upon giving prompt notification to the addressee to that effect, treat the data message as though it had never been received.

"(4) An acknowledgement of receipt, when received by the [sender] [originator], is [conclusive] [presumptive] evidence that the related data message has been received and, where confirmation of syntax has been required, that the data message was syntactically correct. Whether a functional acknowledgement has other legal effects is outside the purview of these Rules."

Paragraph (1)

16. The Working Group found the substance of paragraph (1) to be generally acceptable.

Paragraphs (2) and (3)

17. The view was expressed that paragraph (2) should be deleted. It was stated that, while such a provision might appropriately be included in a contractual agreement between trading partners implementing EDI, it was not needed as a statutory rule. In response, it was recalled that paragraph (2), as other draft provisions embodied in chapter III, might be regarded as a default rule for parties that were not bound by a trading-partners agreement, and might be particularly useful in the context of open EDI. The prevailing view was that a rule along the lines of paragraph (2) was generally acceptable.

18. The discussion focused on the scope of the rule contained in paragraph (2). Differing views were expressed as to whether the wording between square brackets ("and stated that the data message is to be of no effect until an acknowledgement is received") should be retained. In favour of deletion, it was stated that the rule contained in paragraph (2) should apply to the most comprehensive range of situations in order to enhance the commercial value of a system of acknowledgement of receipt. A contrary view was that the use of functional acknowledgements was a business decision to be made by EDI users and that the model statutory provisions should not attempt to promote any such procedure. It was stated that the scope of the provision should be made considerably narrower, not only by retaining the words between square brackets but also by adding to those words a proviso to the effect that paragraph (2) would apply only if the originator had specified that the acknowledgement should be received by a certain time. The prevailing view was that it was appropriate for the model statutory provisions to contain a rule addressing the situation covered by the words between square brackets. However, it was widely felt that a separate provision should be prepared to address the more common situation where an acknowledgement was requested, without any statement being made by the originator that the data record would be of no effect until an acknowledgement had been received.

19. With respect to paragraph (3), the view was expressed that the text should be deleted, since it merely repeated a provision already contained in paragraph (2). In response, it was stated that, while paragraphs (2) and (3) might address two aspects of the same factual situation, both provisions were needed to clarify the legal implications of that situation, which were different for the addressee and for the originator. The provision contained in paragraph (3) was needed to establish the point in time when the originator of a data record who had requested an acknowledgement of receipt would be relieved from any legal implication of sending that data record if the requested acknowledgement had not been received. As an example of a factual situation where a provision along the lines of paragraph (3) would be particularly useful, it was stated that the originator of an offer to contract who had not received the requested acknowledgement from the addressee of the offer might need to know the point in time after which it would be free to transfer the offer to another party. As to the scope of the provision contained in paragraph (3), it was widely felt that it should parallel the scope of the provision contained in paragraph (2). As to the formulation of paragraph (3), it was suggested that, before the originator could treat the data record as though it had never been received, the addressee should be given reasonable time to send the requested acknowledgement.

20. A number of concerns were expressed with respect to the possible interplay of paragraph (3) with other paragraphs of draft article 11. A concern was expressed as to the possible effect of a notification under paragraph (3) that the data record would be treated as though it had never been received in a situation where the originator had already stated under paragraph (2) that the data record was of no effect until an acknowledgement was received. It was stated that, in such a situation, it would be unnecessary to treat the data record "as though it had never been received" since it was already of not effect as a result of the original statement made by the originator. It was suggested that, under those circumstances, the only possible meaning of a notification under paragraph (3) would be to establish an additional time period within which the addressee could acknowledge receipt. It was stated that such a provision would result in an overly complex mechanism. Another concern was expressed that

acknowledgement by any communication or conduct of the addressee under paragraph (1) might be inappropriate in the context of paragraph (3).

21. A number of draft texts were proposed as possible substitutes for paragraphs (2) and (3). In order to accommodate the above-mentioned suggestions and concerns, the Working Group entrusted a small working party with the task of producing a single revised draft of paragraphs (2) and (3) for continuation of the discussion. The revised text as considered by the Working Group was as follows:

"(2) If on or before transmitting a data [record] [message], or by means of that data [record] [message], the originator has requested an acknowledgement of receipt, and has stated that the data [record] [message] is conditional on receipt of that acknowledgement, then that data [record] [message] is of no legal effect until the acknowledgement is received as specified.

"(3) If on or before transmitting a data [record] [message], or by means of that data [record] [message], the originator has requested an acknowledgement of receipt, but has not made the data [record] [message] conditional upon receipt of that acknowledgement, the following rules apply if the originator does not receive the requested acknowledgement:

"(a) The originator may give prompt notice to the addressee

"(i) that no acknowledgement has been received;

"(ii) setting forth a [further reasonable] time by which acknowledgement must be received [time being of the essence]; and

"[(iii) stating that unless the requested acknowledgement is given accordingly, then the data [record] [message] will be treated as though it had never been transmitted.]

"(b) If the acknowledgement is not received within the time specified in subparagraph (a) (ii), the originator may treat the data [record] [message] as though it had never been transmitted, or otherwise proceed in accordance with its rights.

"(c) In the absence of the originator's receipt of the acknowledgement, the addressee [may not rely upon the data [record] [message] and] assumes the risk that the originator may treat the data [record] [message] [as though it had never been transmitted under] [in accordance with] paragraph (3) (b)."

New paragraph (2)

22. The Working Group found the substance of the paragraph to be generally acceptable.

New paragraph (3)

Opening words

23. It was noted that the proposed text did not address the situation where the originator requested that an acknowledgement of receipt should be received from the addressee within a specified time period. It was generally felt that additional language should be added to the opening words along the following lines: "within the time specified or agreed or, if no time has been specified or agreed, within reasonable time".

Subparagraph (a)

24. The view was expressed that the provision might overly burden the originator by providing that it should give notice to the addressee prior to considering the data record as though it had never been transmitted. In response, it was stated that the purpose of the provision was not to create any obligation binding on the originator, but merely to establish means by which the originator, if it so wished, could clarify its status in cases where it had not received the requested acknowledgement. It was generally agreed that, in order to clarify that the procedure established under subparagraph (a) was at the discretion of the originator, the word "prompt" should be deleted.

Subparagraphs (a) (i) and (ii)

25. As a matter of drafting, it was generally felt that wording such as "time being of the essence" should be avoided, since it was only reflective of common law and might not carry the same significance under other legal systems. With respect to the words "further reasonable" between square brackets in subparagraph (a) (ii), a view was that the additional time specified in the notice did not need to be "reasonable" since such a notice could only be sent after expiry of the time within which the addressee had failed to respond to the initial request for an acknowledgement. After discussion, the Working Group adopted the substance of subparagraph (a) (i) and decided that the text of subparagraph (a) (ii) should read along the following lines: "setting forth a specified time, which must be reasonable, by which the acknowledgement must be received".

Subparagraphs (b) and (c)

26. The discussion focused on subparagraph (c). A number of concerns were expressed with respect to the formulation of the provision. As a matter of logic, it was stated that it was inappropriate to provide that the addressee "may not rely" on a data record. The addressee would, in most conceivable circumstances, be free to rely or not to rely on any given data record, provided that it would bear the risk of the data record being unreliable. A discussion took place as to what the substance of the risk incurred by the addressee might be. A concern was expressed that the proposed text of subparagraph (c) made it insufficiently clear whether the risk was that the originator who had not received the requested acknowledgement might, without giving further notice to the addressee, automatically treat the data record as though it had never been transmitted, or whether the risk was merely that the originator could send a notice establishing a time limit for the receipt of the requested acknowledgement. A suggestion was made to redraft subparagraph (c) as follows: "In the absence of the originator's receipt of the acknowledgement, the addressee proceeds at its own risk". The suggestion was objected to on the grounds that it did not make it sufficiently clear that the originator could not treat the data record as though it had never been transmitted unless a notification was sent under subparagraph (a). It was stated that, should the provision contained in subparagraph (c) create the risk that a data record could be treated automatically as though it had never been transmitted, this would run counter to the decision to limit the scope of paragraph (2) to situations where the data record was conditional on receipt of the acknowledgement. It was stated in response that there existed a need to cover the most common situation, where no such condition had been specified, and that a limitation of the risk incurred by the addressee to the mere receipt of a notice under subparagraph (a) would deprive subparagraph (c) of most of its significance.

27. After discussion, the Working Group decided to delete both subparagraphs (a) (iii) and (c). The Working Group also decided that the text of subparagraph (b) should read along the following lines:

> "(b) If the acknowledgement is not received within the time specified in subparagraph (a) (ii), the originator may, upon notice to the addressee, treat the data record as though it had never been transmitted, or otherwise proceed in accordance with its rights."

Paragraph (4)

28. Differing views were expressed as to whether the paragraph should be maintained. In favour of deletion, it was stated that presumptions as to the receipt of a data record would either be established by trading partners-agreements, or should be left for determination by competent courts. The prevailing view, however, was that a provision along the lines of paragraph (4) was needed to create certainty and would be particularly useful in the context of electronic communication between parties that were not linked by a trading-partners agreement.

29. With respect to the words between square brackets ("[conclusive] [presumptive]"), there was general agreement that the presumption established should be of a rebuttable character. It was suggested that the provision should be limited to establishing "prima facie evidence". That suggestion was objected to on the grounds that a reference to prima facie evidence would insufficiently reflect the intent of the Working Group to establish a presumption that would be binding on the parties unless evidence to the contrary was produced. After discussion, the Working Group decided that reference should be made to "presumptive evidence".

30. As regards the confirmation of syntax and syntactical correctness of a data record, a concern was expressed that the word "syntax" was ambiguous, since it did not make it clear whether the provision was referring simply to grammar or to communication protocols and other technical requirements known as "data syntax" in the context of computer-to-computer communication. It was stated that, should the use of the word "syntax" be construed as a reference to grammar, the provision might be misinterpreted as dealing with the content of the data record. It was also stated that such a provision would, at any rate, not be applicable to telegram, telex and telecopy. Support was expressed for the deletion of the last part of the first sentence of paragraph (4). The prevailing view, however, was that a reference to technical requirements was needed, in view of the practical importance and the widespread use of such requirements in electronic communication. After discussion, the Working Group decided that the reference to technical requirements should be rephrased in media-neutral terms to avoid ambiguity.

31. There was general agreement that the provision contained in the second sentence of the paragraph was superfluous and should be deleted.

32. With a view to accommodating the above-mentioned concerns, it was proposed that paragraph (4) should be replaced by the following:

> "(4) When the [sender] [originator] receives an acknowledgement of receipt, that acknowledgement is presumptive evidence that the related trade data message was received by the addressee. When the received acknowledgement states that the related trade data message met technical requirements, either agreed upon or set forth in applicable standards, the acknowledgement is presumptive evidence that those requirements have been met."

33. After discussion, the Working Group adopted the substance of the proposal and referred the text of draft article 11 to the drafting group.

Article 12. Formation of contracts

34. The text of draft article 12 as considered by the Working Group was as follows:

> "(1) In the context of contract formation, unless otherwise agreed by the parties, an offer and the acceptance of an offer may be expressed by means of data [records] [messages]. Where a

contract is formed by means of data [records] [messages], it shall not be denied validity or enforceability on the sole ground that the contract was concluded by such means.

"[(2) A contract concluded by means of data [records] [messages] is formed at the time when [, and at the place where] the data [record] [message] constituting acceptance of an offer is received by its addressee or deemed to be received under article 13.]"

Title

35. The view was expressed that the title insufficiently reflected the content of the provisions contained in the draft article, since those provisions dealt not only with the issue of contract formation but also with the form in which an offer and an acceptance might be expressed. The Working Group generally agreed that the matter needed to be considered by the drafting group.

Paragraph (1)

36. Differing views were expressed as to whether a rule along the lines of paragraph (1) was necessary. One view was that paragraph (1) should be deleted. In support of that view, it was argued that paragraph (1) was superfluous since it merely stated the obvious, namely that an offer and an acceptance, as any other expression of will, could be communicated by any means, including data records. It was observed that there might be no need to restate, in the context of contract formation, a principle already embodied in other model statutory provisions, such as draft articles 5 bis, 9 and 10, all of which established the legal effectiveness of data records. In addition, it was stated that paragraph (1) might have the harmful effect of overruling otherwise applicable provisions of national law, which might prescribe specific formalities for the formation of certain contracts. Such forms included notarization and other requirements for writings, and might respond to considerations of public policy, such as the need to protect certain parties or to warn them against specific risks.

37. The prevailing view, however, was that paragraph (1) should be retained. It was stated that, in certain jurisdictions, it was not obvious that contracts could be concluded by electronic means; and that the fact that electronic messages might have legal value as evidence and produce some effects, as provided in draft articles 9 and 10, did not necessarily mean that they could be used for the purpose of concluding valid contracts. In addition, it was stated that paragraph (1) was not intended to interfere with national law on the formation of contracts but rather to promote international trade by providing increased legal certainty as to the conclusion of contracts by electronic means.

38. As to the exact formulation of paragraph (1), a number of concerns were expressed. One concern was that paragraph (1) did not make it clear whether it covered only the cases in which both the offer and the acceptance were communicated by electronic means or also cases in which only the offer or only the acceptance was communicated electronically. In order to alleviate that concern, it was suggested that the words "by means of data records" should be replaced by language along the following lines: "by an offer or acceptance in a data record". Another concern was that the expression "on the sole ground" might not fulfil its intended purpose since, in cases where a contract concluded electronically would be denied validity or enforceability, it could be argued that the denial was not based on the sole ground that the contract had been concluded electronically but on additional grounds as well. In order to address that concern, it was suggested that a new paragraph (2) should be inserted along the following lines: "The fact that a contract is formed by an offer or acceptance in a data record shall not be taken to be the sole reason for denying the legal validity or enforceability of the contract if it is shown that, in the particular case in question, the consequence of recording the offer or acceptance in a data record is that the record may be unreliable or that, in any other respect, the conditions in article 6 (1) are not met". Yet another concern was that the current formulation did not

sufficiently clarify the way in which other formal requirements, such as the payment of a stamp duty, might apply.

39. After discussion, the Working Group adopted the substance of paragraph (1), which was referred to the drafting group. In order to address the above-mentioned concern that paragraph (1) should not overrule provisions of applicable law that might be regarded as essential in certain countries for public policy reasons, the Working Group decided to add a new paragraph along the lines of paragraph (2) in draft articles 6, 7 and 8, which provided that an enacting State could exclude the application of paragraph (1) in certain instances to be specified in the instrument enacting the model statutory provisions.

Paragraph (2)

40. Differing views were expressed as to whether paragraph (2) should be retained. In support of retention, it was stated that paragraph (2) was intended to address the uncertainty prevailing in many legal systems as to the time and place of conclusion of contracts, in cases where the offer and the acceptance might be exchanged electronically. It was also stated that the rule contained in paragraph (2) reflected similar rules in international instruments such as the United Nations Convention on Contracts for the International Sale of Goods, and in many national laws.

41. The prevailing view, however, in line with a view that had already prevailed at the twenty-sixth session of the Working Group (see A/CN.9/387, para. 151), was that paragraph (2) should be deleted, since it unnecessarily interfered with the law applicable to the formation of contracts. It was felt that a provision along the lines of paragraph (2) might exceed the aim of the draft model statutory provisions, which should be limited to providing that electronic communications would achieve the same degree of legal certainty as paper-based communications. It was also felt that, in many instances, the combination of existing rules on the formation of contracts with the provisions contained in draft article 13 would produce effects similar to those which had been expected from paragraph (2) by its proponents.

Article 13. Time and place of receipt of a data [record] [message]

42. The text of draft article 13 as considered by the Working Group was as follows:

"(1) Unless otherwise agreed between the [sender] [originator] and the addressee of a data [record] [message] and [unless otherwise provided by other applicable law], a data [record] [message] is deemed to be received by its addressee

"(a) [subject to subparagraph (b) of this article,] at the time when the data [record] [message] enters the information system of, or designated by, the addressee in such a way that it can be retrieved by the addressee or when the data [record] [message] would have entered the information system and been capable of being retrieved if the information system of the addressee had been functioning properly.

"[(b) if the data [record] [message] is in such a form that it requires translation, decoding or other processing in order to become intelligible by the addressee, at the time when such processing is completed or at the time when such processing could reasonably be expected to be completed.]

"(2) Unless otherwise agreed between the [sender] [originator] and the addressee of a data [record] [message] and [unless otherwise provided by other applicable law], a data [record]

[message] is deemed to be received by its addressee at the place where the addressee has its place of business; where the addressee has more than one place of business, the data [record] [message] is deemed to be received at the place of business with the closest relationship to the content of the data [record] [message]."

Paragraph (1)

Opening words

43. It was generally agreed that the proviso within square brackets ("unless otherwise provided by other applicable law") should be deleted, since deviation by other law from the rules established under draft article 13 would introduce uncertainty as to the time and place of receipt of data records.

44. In the context of the discussion of the opening words in paragraph (1), the view was expressed that draft article 13 should not only contain provisions regarding the time and place of receipt of data messages but that it should equally address the issue of dispatch. A treatment of the issue of dispatch of data records was said to be particularly important for those countries where a communication would normally be binding on its sender as of the time of its dispatch. It was observed that provisions establishing the time of dispatch of data records would be particularly important in view of the decision made by the Working Group to delete draft article 12 (2) regarding the time and place of formation of contracts by electronic means. General support was expressed in favour of that view.

Subparagraph (a)

45. The substance of subparagraph (a) was found to be generally acceptable. A suggestion, which received general support, was that the provision should be amended to address the situation where the addressee had designated an information system, which might or might not be an information system of the addressee, and the data record reached an information system of the addressee that was not the designated system. In such a situation, it was suggested that the designated information system should prevail. While it was suggested that such a situation would, in many instances, be covered by an agreement between the originator and the addressee, it was generally felt that an additional provision was needed to address the situation where the addressee unilaterally designated a specific information system for the receipt of a message. A proposal was made to include wording along the following lines: "if the addressee has designated a specific information system for receipt of a specific data record but the data record is sent to another information system of the addressee, the data record is not deemed to be received until the data message is actually accessed by the addressee". The substance of the proposal was found to be generally acceptable.

46. A number of concerns were expressed with regard to subparagraph (a). One concern was that the meaning of the expression "information system" was not clear, since in some instances it appeared to be indicating a communications network, and in other instances an electronic mailbox or even a telecopier. In addition, it was stated that it was not clear whether the information system had to be located on the premises of the addressee or on other premises. In order to address that concern, it was suggested to define the term "information system" in draft article 2. Another concern was that subparagraph (a) did not contain specific provisions as to how the designation of an information system should be made, or whether a change could be made after such a designation by the addressee. Yet another concern was expressed regarding the use of the words "functioning properly". It was suggested that such a wording might inadequately cover the situation, for example, of a telecopier which, although not malfunctioning, was always busy and thus was not accessible. The view was expressed that a provision was needed to make it clear that, in order to be treated as functioning properly, a system should be accessible.

Subparagraph (b)

47. Various concerns were expressed regarding subparagraph (b). One concern was that a reference to the data record being made "intelligible" was imprecise and that it might create a more stringent requirement than currently existed in a paper-based environment, where a message could be considered to be received even if it was not intelligible for the addressee. Another concern was that the reference to "translation" was inappropriate outside an EDI environment, since it might be misconstrued to suggest that a text written in a foreign language had to be translated before it could be regarded as received under subparagraph (b). A further concern was that subparagraph (b) did not take into account the situation where information was sent and not intended to be intelligible to the addressee. As an example of such a situation, it was said that encrypted data could be transmitted to a depository for the sole purpose of retention in the context of intellectual property rights protection.

48. While it was widely felt that subparagraph (b) should be deleted, it was also felt that an attempt should be made to refine the formulation of the provision to state precisely what was said to be an important addition to the concept of receipt in the context of EDI, namely that the addressee might need time to be able to decode and understand the received data record or any relevant part of that data record.

Paragraph (2)

49. Differing views were expressed as to whether paragraph (2) should be retained. In support of deletion, it was stated that paragraph (2) was superfluous, since the place of receipt was already implicit in paragraph (1), in that a data record would be presumed to be received at the place it would have reached at the time of its receipt under paragraph (1). In that connection, it was observed that, at any rate, the text of paragraph (2) would need to be redrafted to avoid inconsistency with paragraph (1). Another view was that the provision contained in paragraph (2) was inappropriate, since it indirectly established a conflict-of-laws rule, which might not be acceptable as a general rule, particularly in view of the fact that it was based on a fictitious determination of the place of receipt of data records. A further view was that paragraph (2) should be deleted since it introduced an unnecessary distinction between the presumed place of receipt and the place actually reached by a data record at the time of its receipt under paragraph (1). Such a distinction could be misinterpreted as allocating to the originator the risk of any loss or alteration of the data record between the time of its receipt under paragraph (1) and the time when it reached its place of receipt under paragraph (2). A concern was also expressed that paragraph (2) would be inappropriate for telegram or telex and that, should the provision be retained, it should be limited in scope to cover only computerized transmissions of data records.

50. The prevailing view, however, was that paragraph (2) should be retained. It was recalled, in line with the views expressed at the twenty-sixth session of the Working Group (A/CN.9/387, para. 161), that a principal reason for including a rule on the place of receipt of a data record would be to address a circumstance characteristic of electronic commerce that might not be treated adequately under existing domestic or international law, namely, that very often the information system of the addressee where the data record was received, or from which the data record was retrieved, was located in a jurisdiction other than that in which the addressee itself was located. Thus, the rationale behind the provision was to ensure that the location of an information system would not be the dispositive element, but rather that there should be some reasonable connection between the addressee and what was deemed to be the place of receipt, and that that place could be readily ascertained by the originator. It was stated that the provisions contained in paragraph (2) did not establish a rule on the apportionment of risks between the originator and the addressee in case of damage or loss of a data record between the time of its receipt under paragraph (1) and the time when it reached its place of receipt under paragraph (2). Paragraph (2) merely established a presumption regarding a legal fact, to

be used where other applicable law (e.g., the law on formation of contract or a conflict-of-laws rule) required determination of the place of receipt of a data record.

51. As to the exact formulation of paragraph (2), a number of suggestions were made: to delete the words "unless otherwise provided by other applicable law" between square brackets, for the reason given for their deletion from paragraph (1) (see above, para. 43); to introduce language to avoid a possible inconsistency between paragraphs (1) and (2); to replace the words "is deemed" by the words "is presumed" so as to make it clear that the legal presumption that was being created would be rebuttable; to define the time of dispatch along the following lines: "A data record is deemed to be dispatched when it leaves the immediate control of the originator"; to limit the scope of application of paragraph (2) to computerized transactions; to replace the reference to "the content of the data record" by a reference to "the underlying transaction", which was said to be more in line with other existing international instruments; and, subject to the decision to be taken at a later stage as to the scope of application of the model statutory provisions in the context of draft article 1, to introduce language excluding matters of administrative, criminal and data-protection law from the scope of paragraph (2).

52. In order to address the above-mentioned suggestions and concerns, the Working Group entrusted a small working party with the task of producing a revised draft of article 13 for continuation of the discussion. The revised text of draft article 13 as considered by the Working Group was as follows:

"Article 13. Time and place of dispatch and receipt of a data record

"(1) Unless otherwise agreed between the [sender] [originator] and the addressee of a data [record] [message], dispatch of a data [record] [message] occurs when the data [record] [message] reaches a communications system outside the control of the originator.

"(2) Unless otherwise agreed between the [sender] [originator] and the addressee of a data [record] [message], the time of receipt of a data [record] [message] is determined by the following:

"(a) if the addressee has designated an information system for the purpose of such data records, receipt occurs at the time when the message enters the designated information system;

"(b) if the addressee has not designated an information system, receipt occurs when the data [record] [message] enters an information system of the addressee;

"(c) notwithstanding subparagraph (a), if a data [record] [message] is not sent to the designated information system but to another information system of the addressee, receipt occurs when the data [record] [message] is retrieved by the addressee;

"(d) in a case within subparagraph (a) or (b), if the information system is not functioning properly, a data [record] [message] is received when the data [record] [message] would have entered the information system and been capable of being retrieved had the information system been functioning properly;

"(e) in a case within subparagraph (a) or (b), if the data [record] [message] requires decoding or other processing to be usable by the addressee, receipt occurs at the time when such processing is completed or when such processing could reasonably be expected to be completed, whichever is earlier.

"This paragraph applies notwithstanding that the place where the information system is located

may differ from the place where the data [record] [message] is received under paragraph (3).

"(3) Unless otherwise agreed between the [sender] [originator] and the addressee of a computerized transmission of a data [record] [message], a data [record] [message] is received at the place where the addressee has its place of business. Where the addressee has more than one place of business, the place of business for purposes of this paragraph is that which has the closest connection with the underlying transaction.

"(4) Paragraph (3) shall not apply to the determination of place of receipt for the purpose of any administrative, criminal or data protection laws."

New paragraph (1)

53. A concern was expressed that a message should not be considered to be dispatched if it reached the information system of the addressee but failed to enter it. In order to address that concern, it was suggested that the word "reaches" should be replaced by the word "enters", while it was recognized that the time of entry could not be easily determined. For reasons of consistency with the terminology used in other paragraphs of draft article 13, it was suggested that the word "time of" should be inserted before the word "dispatch" and that the words "communications system" should be replaced by the words "information system ". As to the term "information system", it was suggested that it might need to be defined in draft article 2. In response to a concern expressed, it was explained that paragraph (1) did not address situations in which a malfunctioning of the information system of the originator was involved since in such cases the originator would normally be aware of the fact that dispatch did not occur. After discussion, the Working Group approved the substance of new paragraph (1) and referred the above-mentioned suggestions to the drafting group. The Working Group also decided to consider the issue of a possible definition of "information system" in the context of the forthcoming discussion of draft article 2.

New paragraph (2)

Subparagraphs (a), (b) and (c)

54. It was noted that both subparagraphs (a) and (c) dealt with the situation in which the addressee had designated an information system. For that reason, the Working Group decided to combine subparagraphs (a) and (c). The Working Group approved the substance of subparagraphs (a), (b) and (c), subject to review by the drafting group.

Subparagraph (d)

55. A number of concerns were expressed with regard to subparagraph (d). One concern was that subparagraph (d) might be interpreted as placing on the addressee the burdensome obligation to maintain its system functioning at all times. In response, it was pointed out that subparagraph (d) was merely intended to address the situation in which the addressee might have wilfully or negligently caused the malfunctioning of its information system. It was recalled that that problem had been identified by the Working Group at its twenty-sixth session (see A.CN.9/387, para. 154) and that subparagraph (d) was in line with the principle of observance of good faith in international trade, which was embodied in draft article 3. In that connection, the view was expressed that the originator should be protected in cases where the information system of the addressee would not function at all or would function improperly, but not in cases where receipt was impossible because the information system of the addressee was occupied. Another concern expressed was that subparagraph (d) might introduce some uncertainty since it was predicated upon the concept of malfunctioning, the exact

meaning of which was not clear. Furthermore, the view was expressed that subparagraph (d) would be contrary to rules of national laws adopting the theory of receipt, under which a contract could not be formed if the acceptance of the offer had not reached the offeror because of malfunctioning of its information system. In view of the above concerns, the Working Group decided to delete subparagraph (d).

Subparagraph (e)

56. For reasons already expressed in the context of the discussion of subparagraph (b) of paragraph (1) of the draft prepared by the Secretariat (see above, para. 47), the view was expressed that the rule contained in subparagraph (e) was not appropriate. It was stated that subparagraph (e) would be contrary to certain rules of national laws under which receipt of a message occurred at the time when the message reached the sphere of the addressee, irrespective of whether the message was usable by the addressee. In addition, it was stated that subparagraph (e) would run counter to trade usages, under which certain encoded messages were deemed to be received even before they were usable. The Working Group noted that the issue might need to be reopened in the context of future deliberations on acknowledgement of receipt under draft article 11 and decided to delete subparagraph (e).

New paragraph (3)

57. The Working Group found the substance of new paragraph (3) to be generally acceptable. However, a suggestion was made that the wording of the paragraph might need to be refined to make it clearer that the provision referred to both actual and contemplated underlying transactions. Another suggestion was that the principal place of business should be taken into consideration, in case there was no underlying transaction. Yet another suggestion was that, in order to bring new paragraph (3) in line with article 10 of the United Nations Convention on Contracts for the International Sale of Goods, language should be added to the effect that the place of habitual residence should be taken into consideration if the addressee had no place of business. The Working Group adopted the substance of the suggestions and referred the matter to the drafting group.

New paragraph (4)

58. The Working Group found the substance of new paragraph (4) to be generally acceptable.

Article 14. Storage of data [records] [messages]

59. The text of draft article 14 as considered by the Working Group was as follows:

"(1) Where it is required by law that certain information be retained as a record, that requirement shall be satisfied if the information is kept in the form of data [records] [messages] provided that the requirements contained in paragraphs (2) and (3) of this article are satisfied.

"[(2) Data [records] [messages] shall be stored unaltered by the [sender] [originator] in the transmitted format and by the addressee in the format in which they are received.]

"[(3) Data [records] [messages] shall be kept readily accessible and shall be capable of being reproduced in a human readable form and, if required, of being printed. Any operational equipment required in this connection shall be made available by the person storing information in the form of data [records] [messages]."

General remarks

60. There was general agreement in the Working Group that draft article 14 served a useful purpose. As to its location in the model statutory provisions, the view was expressed that it should not be included in chapter III, a purpose of which was to provide a set of default rules for optional use by parties using modern means of communication. Instead, draft article 14 should be moved to chapter II, which established a set of substitute rules for existing statutory requirements that were considered to be obstacles to the development of modern trade. Another suggestion was that, since draft article 14 did not deal with "form requirements", it could be placed in a separate chapter. After discussion, the Working Group decided to move draft article 14 to chapter II, the title of which would need to be reconsidered.

61. As regards the structure of draft article 14, a number of concerns were expressed. One concern was that the proviso in paragraph (1) and paragraphs (2) and (3) were redundant to the extent that they were repeating conditions already contained in draft article 6 (1) (a). In order to address that concern, the suggestion was made to combine paragraphs (1), (2) and (3) in a single paragraph along the lines of paragraph (1), but with a different proviso that would read as follows: "provided that the conditions in article 6 (1) (a) are satisfied and the information is stored unaltered by the originator and the addressee".

Paragraph (1)

62. A concern was expressed that the words "certain information" might be unclear under certain national laws and might not sufficiently indicate the general purpose of draft article 14. A related concern was that the word "information" might need to be defined in draft article 2. It was suggested that the words should be replaced by a reference to "certain documents or information". As a matter of drafting, it was suggested that the word "retained" was sufficiently clear and that the words "as a record" should be deleted.

Paragraph (2)

63. A concern was expressed that it might not be appropriate to require that information should be stored unaltered, since usually messages had to be decoded, compressed or converted in order to be stored. In order to address that concern, it was suggested that reference should be made not to messages having to be stored unaltered, but rather to messages having to be stored "in the format in which they were transmitted or in a format which accurately reflects the transmitted information". Another concern was that paragraph (2), to the extent that it required both the originator and the addressee to store messages, ran contrary to trade usages.

Paragraph (3)

64. A concern was expressed that paragraph (3) failed to cover all the information that might need to be stored, which included, apart from the message itself, certain transmittal information that might be necessary for the identification of the message. Another concern was that paragraph (3) did not address a situation frequently encountered in practice, namely storage of information not by the originator or the addressee but by intermediaries.

65. In order to address the above-mentioned suggestions and concerns, the Working Group entrusted a small working party with the task of producing a revised draft of article 14 for continuation of the discussion. The revised text of draft article 14 as considered by the Working Group was as follows:

"(1) Where it is required by law that certain documents, records, or information be retained,

that requirement shall be satisfied by data [records] [messages] retained under the following conditions:

"(a) [parallel the conditions in Article 6(1)],

"(b) the data [record] [message] is stored in the transmitted format or in a format which can be demonstrated to represent accurately the transmitted information; and

"(c) transmittal information associated with the data [record] [message] including, but not limited to sender, recipient[s] and date and time of transmission, is retained, except where unavailable due to communications system operations not controlled by the person to whom the retention requirement applies.

"(2) A person may satisfy its retention obligations by using the services of an intermediary, provided the above conditions are satisfied."

New paragraph (1)

66. It was explained that subparagraphs (a), (b) and (c) were intended to set out the conditions under which the obligation to store data records that might exist under applicable law would be met. With regard to subparagraph (b), it was emphasized that the message did not need to be retained unaltered as long as the information stored accurately reflected the data record as it was sent. With regard to subparagraph (c), it was pointed out that it was intended to address the concern that, while some transmittal information was important and had to be stored, other transmittal information could be excepted without the integrity of the data records being compromised.

Opening words

67. A concern was expressed that the words "where it is required by law" in the chapeau might create the impression that all areas of law were covered, including certain areas where a provision along the lines of draft article 14 would be inappropriate, e.g., accountancy, money laundering and supervisory law. In order to address that concern, it was suggested that a limitation in scope similar to the limitation introduced in new paragraph (4) of draft article 13 (see above, para. 52) should be included in draft article 14. The Working Group was agreed that the issue might need to be reconsidered in the context of the discussion of draft article 1.

Subparagraphs (a) and (b)

68. The Working Group found the substance of subparagraphs (a) and (b) to be generally acceptable.

Subparagraph (c) and new paragraph (2)

69. The concern was expressed that the exception contained at the end of subparagraph (c) might appear to encourage bad practice or wilful misconduct, to the extent that a person required to store data records could be excused from that obligation on the ground that the information system of the chosen intermediary was operating in such a way that it did not retain transmittal information. In response to that concern, it was pointed out that subparagraph (c), by imposing the retention of the transmittal information associated with the data record, was creating a standard that was higher than most standards existing as to the storage of paper-based communications. In addition, it was stated that a clear distinction should be drawn between those elements of transmittal information that were important for the identification of the message and the very few elements of transmittal information

(e.g., communication protocols) which were of no value with regard to the data record and which, typically, would automatically be stripped out of an incoming EDI message by the receiving computer before the data record actually entered the information system of the addressee. Another concern was that subparagraph (c) might impose ambiguous obligations since the distinction between transmittal information and data records was not sufficiently clear. Yet another concern was that subparagraph (c) might appear to require storage of information that ordinarily would not have to be stored under the applicable national law. Yet another concern was that subparagraph (c) failed to provide that the person obliged to store data records would be allowed to use the services of other third parties and not only of intermediaries as defined in draft article 2.

70. In order to address those concerns, the Working Group requested the small working party to revise subparagraph (c) and new paragraph (2). The revised text as considered by the Working Group was as follows:

"(c) transmittal information associated with the data record including, but not limited to sender, recipient [s], and date and time of transmission, is retained.

"(2) An obligation of an addressee to retain information in accordance with paragraph (1) shall not extend to any part of such information which is transmitted for communications control purposes but which does not enter the information system of or designated by the addressee.

"(3) A person may satisfy its retention obligations by using the services of an intermediary, provided the above conditions are satisfied."

71. While the substance of the revised text was found to be generally acceptable, it was pointed out that a provision should be included in new paragraph (3) allowing for the storage of data records through any third party.

72. The Working Group approved the revised substance of draft article 14 and referred it to the drafting group.

Article 15. Liability

73. The text of draft article 15 as considered by the Working Group was as follows:

"[(1) Each party shall be liable for damage arising directly from failure to observe any of the provisions of the uniform rules except in the event where the party is prevented from so doing by any circumstances which constitute an impediment beyond that party's control and which could not reasonably be expected to be taken into account at the time when that party engaged in sending and receiving data [records] [messages] or the consequences of which could not be avoided or overcome.]

"[(2) If a party engages any intermediary to perform such services as the transmission, logging or processing of a data [record] [message], the party who engages such intermediary shall be liable for damage arising directly from that intermediary's acts, failures or omissions in the provision of the said services.]

"[(3) If a party requires another party to use the services of an intermediary to perform the transmission, logging or processing of a data [record] [message], the party who requires such use shall be liable to the other party for damage arising directly from that intermediary's acts, failures or omissions in the provision of the said services.]"

74. It was generally felt that draft article 15 as a whole should be deleted. In line with remarks made at the twenty-sixth session of the Working Group (A/CN.9/387, para. 170), it was noted that, with the possible exception of draft articles 10 and 11, the model statutory provisions did not seem, at least at this stage, to introduce duties additional to those existing under the applicable law and the contractual arrangements of the parties. It was agreed that, while the issues of liability and allocation of risk in electronic communications might need to be reconsidered in the context of future work, it would be premature to engage in a general debate on those issues in the context of this project. After discussion, the Working Group decided to delete draft article 15.

TITLE OF MODEL STATUTORY PROVISIONS

75. The reference in the title to "model statutory provisions" gave rise to a review by the Working Group of its earlier decision to formulate a legal text in the form of statutory provisions (A/CN.9/390, para. 16). The Working Group reaffirmed its decision that the form of the text should be that of a model law (ibid., para. 17). It was widely felt that the use of the term "model statutory provisions" might raise uncertainties as to the legal nature of the instrument. It was recalled that the use of the term "model statutory provisions" had been decided in order to reflect that the text contained a variety of provisions relating to existing rules scattered throughout various parts of different national laws in a typical enacting State, and that it had been felt at the previous session that such provisions would not necessarily be incorporated as a whole or together by an enacting State in any one particular place in its statutes. While some support was expressed for the retention of the term "model statutory provisions", the widely prevailing view was that the term "model law" should be preferred. It was widely felt that, as a result of the course taken by the Working Group as its work progressed towards the completion of the text, the model statutory provisions could be regarded as a balanced and discrete set of rules, which could also be implemented as a whole in a single instrument.

76. A number of misgivings were expressed as to the remainder of the title. They included: discomfort with the words "the legal aspects", which were described as being too vague for the title of a legislative text and, alternatively, were said to create the mistaken impression that the text dealt with all the legal issues that might be related to the use of EDI; the use of the word "communication", which was felt to be too narrow and appeared to limit the scope of the text to cover only situations where information was transmitted, to the exclusion of cases where it was merely stored; and the possible inadequacy of the reference at the end of the title to "related means of data communication".

77. Various proposals were made aimed at addressing those concerns, while reflecting the common understanding that the title should take into account various possible technologies and combinations of technologies, along with the essential element of durable recording. Those proposals included the use of expressions such as: "electronic commerce"; "legal aspects of electronic communication and retention of information"; "EDI and other means of electronic commerce"; "legal aspects of EDI". None of the suggested wordings was found to be fully satisfactory. After discussion, the Working Group adopted the following title: "Draft Model Law on Legal Aspects of Electronic Data Interchange (EDI) and Related Means of Communication".

CHAPTER I. GENERAL PROVISIONS

Footnote to chapter I

78. The text of the footnote to chapter I as considered by the Working Group was as follows:

"* These statutory provisions do not override any rule of law intended for the protection of

consumers".

79. A concern was expressed that, as a matter of legislative drafting, the use of footnotes was inappropriate. The Working Group, however, recalling the decision made at its previous session (see A/CN.9/390, para. 36), decided that the form of the footnote should be maintained. The Working Group found the substance of the footnote to be generally acceptable.

Article 1. Sphere of application

80. The text of draft article 1 as considered by the Working Group was as follows:

"Sphere of application**

"These statutory provisions apply to [commercial] information in the form of a data [record].

"** The Commission suggests the following text for States that might wish to limit the applicability of these statutory provisions to international data [records]:

"These statutory provisions apply to a data [record] as defined in paragraph (1) of article 2 where the data [record] relates to international trading interests."

81. Divergent views were expressed with respect to the use of the notion of "commercial information". One view was that any reference to "commerce" or "trade" should be avoided. In support of that view, it was stated that such a reference might raise difficulties, since certain common-law countries, as well as certain civil-law countries, did not have a discrete body of commercial law, and it was not easy or usual in such countries to distinguish between the legal rules that applied to "trade" transactions and those that applied more generally. It was stated that previous UNCITRAL legal texts had avoided unnecessary references to such notions as "trade" or "commerce", while the UNCITRAL Model Law on International Commercial Arbitration, which contained such references, also provided a definition of the term "commercial". It was recalled that the same concern had been expressed at the previous session of the Working Group (A/CN.9/390, paras. 23 to 26). It was stated that, while the Working Group, at its previous sessions, had decided that the focus of the text should not be on the relationships between EDI users and public authorities (ibid., para. 21), no decision had been made to render the draft Model Law inapplicable to such relationships.

82. The prevailing view, however, was that the draft Model Law should somehow be limited in scope to the commercial area. It was stated that such a limitation would appropriately reflect the general mandate of the Commission with respect to international trade law. It was also stated that the draft Model Law had been prepared against the background of trade relationships and might not be appropriate for other kinds of relationships. It was widely felt, however, that the use of the term "commercial" might make it necessary to define that notion in the draft Model Law and that such a definition should, for reasons of consistency, be modelled on the footnote to article 1 of the UNCITRAL Model Law on International Commercial Arbitration. It was also felt that nothing in the draft Model Law should prevent an implementing State to extend the scope of the draft Model Law to cover uses of EDI and related means outside the commercial sphere. It was agreed that that point should be expressed clearly in the implementation guide to be prepared at a later stage.

83. As to how the limitation to the commercial area should be formulated, the view was expressed that limiting the scope of the draft Model Law to "commercial information" was inappropriate. It was stated that, while it should be made clear that the rules were intended to apply in the area of commercial law, it would be inappropriate and impractical to further limit the scope to "commercial information". The following text was proposed as a substitute for draft article 1: "This law is part of commercial law. It applies to any kind of information in the form of a data record". After discussion, the proposal was adopted by the Working Group, which also decided to include a footnote along the lines of the footnote to article 1 of the UNCITRAL Model Law on International Commercial Arbitration.

Footnote to article 1

84. While the view was expressed that the scope of the draft Model Law should be limited to the area of international trade, the Working Group, recalling the decision made at its previous session, decided that the text should be maintained.

85. At the close of its deliberation of draft article 1, the Working Group decided to proceed with draft article 3 and to revert its attention to the definitions contained in draft article 2 after it had completed its review of the other draft articles (see below, paras. 132 to 156).

Article 3. Interpretation of the model statutory provisions

86. The text of draft article 3 as considered by the Working Group was as follows:

"Variant A (1) In the interpretation of these statutory provisions, regard is to be had, [where appropriate], to their international character and to the need to promote uniformity in their application and the observance of good faith.

(2) Questions concerning matters governed by these statutory provisions which are not expressly settled in them are to be settled in conformity with the general principles on which these statutory provisions are based.

"Variant B In the interpretation of these statutory provisions, regard is to be had to their purpose of giving effect to principles formulated internationally, which are intended to facilitate the use of technological developments in methods of communicating and holding information, and the need to promote uniformity in the application of those principles."

87. General preference was expressed in favour of Variant A. The view was expressed, however, that the substance of Variant B might need to be reflected either in a preamble to the draft Model Law or in an implementation guide to be prepared at a later stage. A concern was expressed that the text of Variant B might better reflect that the provisions of the draft Model Law, while resulting from an international inspiration, did not have a built-in international character. With a view to accommodating that concern, it was generally agreed that the words "international character" in the text of Variant A should be replaced by the words "international source". After discussion, the Working Group approved the substance of Variant A and referred the text to the drafting group.

Article 4. [deleted]

Article 5. Variation by agreement

88. The text of draft article 5 as considered by the Working Group was as follows:

"[As between parties involved in generating, storing, communicating, receiving or otherwise processing data [records], and except as otherwise provided in these statutory provisions, their corresponding rights and obligations may be determined by agreement.]"

89. There was general support for the principle of party autonomy, on which draft article 5 was based. It was generally felt, however, that, in line with views expressed in the context of the previous session (A/CN.9/390, para. 75), certain difficulties might arise if the principle of party autonomy was broadly stated along the lines of draft article 5. It was stated that the draft Model Law might, to some extent, be regarded as a collection of exceptions to well-established rules regarding the form of legal transactions. It was recalled that such well-established rules were normally of a mandatory nature since they generally reflected decisions of public policy. A concern was thus expressed that an unqualified statement regarding the freedom of parties to derogate from the model statutory provisions might be misinterpreted as allowing parties, through a derogation to the model statutory provisions, to derogate from mandatory rules adopted for reasons of public policy. It was thus suggested that, at least in respect of the provisions contained in chapter II and in draft article 14, the draft Model Law should be regarded as stating the minimum acceptable form requirement and should, for that reason, be regarded as mandatory, unless they expressly stated otherwise. It was also recalled that, at the previous session of the Working Group, considerable support had been expressed in favour of a proposal that party autonomy should only apply to the provisions of chapter III (ibid., para. 76). After discussion, the Working Group adopted that proposal and referred the text of draft article 5 to the drafting group.

Incorporation by reference

90. In the context of the discussion of draft article 5, a proposal was made to include in the draft Model Law a provision to the effect of ensuring that certain terms and conditions that might be incorporated in a data record by means of a mere reference would be recognized as having the same degree of legal effectiveness as if they had been fully stated in the text of the data record. It was stated that the issue of incorporation by reference of certain terms into EDI messages was crucial to EDI users and that there existed an important need for certainty in the use of that method. It was said that, arguably, EDI was inherently a system of incorporation by reference since EDI messages were meaningless, and of little contractual value, without the incorporation by reference of the relevant communication standards. The proposal was met with considerable interest in the Working Group. It was decided that the issue would be discussed in detail by the Working Group at a future session.

CHAPTER II. FORM REQUIREMENTS

Article 5 bis.

91. The text of draft article 5 bis as considered by the Working Group was as follows:

"Information shall not be denied legal effectiveness, validity or enforceability solely on the grounds that it is recorded as a data [record]."

92. Differing views were expressed as to whether draft article 5 bis should be retained. In favour of

deletion, it was stated that draft article 5 bis was superfluous since the principle of non-discrimination against data records was already embodied in draft articles 6 to 9, and adding a general rule could only create confusion as to the purpose of those draft articles. It was suggested that, should a general statement along the lines of draft article 5 bis be regarded as necessary, it should be included in the legislative guide to enactment to be prepared at a later stage or, at the most, in a footnote to chapter II. It was stated in response that a general provision stating the fundamental principle that data records should not be discriminated against was essential. The prevailing view was that the thrust of draft article 5 bis, which embodied the fundamental principle that data records should not be discriminated against, should be retained. It was widely felt that such a principle should find general application and that its scope should not be limited to evidence or other matters covered in draft articles 6 to 9.

93. Various concerns and suggestions were expressed with regard to the formulation of draft article 5 bis. One concern was that the provision might make it insufficiently clear that it was intended to override rules of applicable national law prescribing the use of a writing or an original. It was suggested that the text of draft article 5 bis should specify that it applied "notwithstanding" any statutory requirements for a writing or an original. Another suggestion was that, in order to prevent a data record from being denied enforceability on the grounds that it was unreliable, wording along the following lines should be inserted in the provision: "The fact that information is recorded as a data record shall not be taken to be the sole reason for denying the legal effectiveness, validity or enforceability of that record if it is shown that, in the particular case in question, the consequence of recording the information as a data record is that the record may be unreliable or that, in any other respect, the conditions in article 6 (1) are not met". That proposal was objected to on the grounds that it could be misinterpreted as suggesting that data records were inherently unreliable. Yet another suggestion was that a new paragraph should be added along the lines of draft articles 6 (2) and 7 (2), allowing enacting States to exclude the application of draft article 5 bis in certain instances to be specified when implementing the draft Model Law. As a matter of drafting, it was suggested that the word "information" should be replaced by the words "a record", or "information in a data record", or "a data record and information therein".

94. After discussion, the Working Group decided that the substance of draft article 5 bis should remain unchanged and referred the drafting suggestions to the drafting group.

Article 6. [Functional equivalent] [Requirement] of "writing"

95. The text of draft article 6 as considered by the Working Group was as follows:

"(1) Where any rule of law requires information to be presented in writing, or provides for certain consequences if it is not, that requirement shall be satisfied in relation to a data [record] containing the requisite information if

"(a) the information can be [reproduced] [displayed] in [visible and intelligible] [legible, interpretable] [durable] form; and

"(b) the information is preserved as a record.

"(2) The provisions of this article do not apply to the following situations: [...]."

Paragraph (1)

Opening words

96. The Working Group approved the substance of the opening words of paragraph (1). It was suggested that, in addition to cases where applicable law required information "to be presented in writing", draft article 6 should address cases where the law required information "to be" in writing. It was generally agreed that wording to that effect should be inserted in the provision.

Subparagraph (a)

97. The Working Group considered the various terms that appeared in subparagraph (a) within square brackets. Differing views were expressed with respect to the word "durable". Under one view, the word should be retained since durability should be regarded as an inherent characteristic of paper. The prevailing view, however, was that the focus of a provision establishing the functional equivalent of a writing should not be on durability, particularly in view of the fact that draft article 6 relied on the notion of "data record" as defined in draft article 2, which already implied a degree of durability. After discussion, the Working Group decided to delete the word "durable". In the context of that discussion, a proposal was made that a reference to the accuracy and reliability should be introduced as an element of the functional equivalent of writing. That proposal did not receive sufficient support.

98. With respect to the words "reproduced" and "displayed", one view was that the word "reproduced" was preferable since it expressed better the concepts of durability and reproducibility that were said to be inherent in paper communications. Another view was that the term "displayed" should be preferred since it reflected more clearly the idea that data records might be converted into a different form and not merely copied, as the term "reproduced" might suggest. Yet another view was that neither word expressed the necessary characteristic that a data record should be accessible or retrievable. It was generally felt that words such as "accessible" or "retrievable" were preferable.

99. With respect to the words "visible", "intelligible", "legible" and "interpretable", the view was expressed that none of those words constituted an objective test to be applied when determining what should be regarded as an equivalent of "writing". It was stated that all of those words would create uncertainty since whether a data record was visible, intelligible, legible or interpretable depended on the person who might have to read them. It was proposed that subparagraph (a) should be replaced by the following: "the information is retrievable in perceivable form". In response, it was stated that the word "perceivable" should also be avoided since it appeared to create a subjective test. In that connection, the concern was expressed that such formulation might fail to cover data records that might not be in a retrievable or perceivable form, e.g., keys in smart cards. Another proposal was that subparagraph (a) should be replaced by the following: "the information can be displayed in a form which is accessible for subsequent reference". While support was expressed in favour of the proposal, it was generally felt that the proposed text needed to be refined in order to avoid creating confusion between the form in which a data record was displayed and the form in which it was stored. After discussion, the Working Group decided that subparagraph (a) should read along the following lines: "the information is accessible so as to be usable for subsequent reference".

Subparagraph (b)

100. The concern was expressed that subparagraph (b) was superfluous since it repeated the notion of preservation which was inherent in data records as defined in draft article 2. While it was generally agreed that retaining subparagraph (b) might not be necessary, it was recalled that the preservation of information was one of the minimum requirements for a data record to satisfy the requirements of writing, and that it should therefore be implied by the rule contained in draft article 6. It was agreed

that the drafting group, after finalizing its redraft of subparagraph (a), should consider whether subparagraph (b) was necessary or not.

Paragraph (2)

101. The Working Group found the substance of paragraph (2) to be generally acceptable.

Article 7. [Functional equivalent] [Requirement] of "signature"

102. The text of draft article 7 as considered by the Working Group was as follows:

"(1) Where a rule of law requires information to be signed, or provides for certain consequences if it is not, that requirement shall be satisfied in relation to a data [record] containing the requisite information if

"[(a) a method [of authentication] identifying the originator of the data [record] and indicating the originator's approval of the information contained therein has been agreed between the originator and the addressee of the data [record] and that method has been used; or]

"(b) a method [of authentication] is used to identify the originator of the data [record] and to indicate the originator's approval of the information contained therein; and

"(c) that method was as reliable as was appropriate for the purpose for which the data [record] was [generated or communicated] [made], in the light of all circumstances [, including any agreement between the originator and the addressee of the data [record]].

"(2) The provisions of this article do not apply to the following situations: [...]."

Paragraph (1)

Subparagraph (a)

103. It was widely felt that the purpose of draft article 7 was to encourage the use of electronic signature, where signature was required by applicable law, but not to allow parties to substitute their own terms for public policy requirements set by the applicable national law. After discussion, the Working Group decided that subparagraph (a) should be deleted.

Subparagraphs (b) and (c)

104. The Working Group approved the substance of subparagraphs (b) and (c) and referred the bracketed language to the drafting group.

Paragraph (2)

105. The Working Group found the substance of paragraph (2) to be generally acceptable.

Article 8. [Functional equivalent] [Requirement] of "original"

106. The text of draft article 8 as considered by the Working Group was as follows:

"(1) Where a rule of law requires information to be presented in the form of an original record, or provides for certain consequences if it is not, that requirement shall be satisfied in relation to a data [record] containing the requisite information if:

"(a) that information is displayed to the person to whom it is to be presented; and

"(b) there exists a reliable assurance as to the integrity of the information between the time the originator first composed the information in its final form, as a data [record] or as a record of any other kind, and the time that the information is displayed.

"(2) Where any question is raised as to whether subparagraph (b) of paragraph (1) of this article is satisfied:

"(a) the criteria for assessing integrity are whether the information has remained complete and, apart from the addition of any endorsement, unaltered; and

"(b) the standard of reliability required is to be assessed in the light of the purpose for which the relevant record was made and all the circumstances.

"(3) The provisions of this article do not apply to the following situations: [...]."

Paragraph (1)

107. The Working Group found the substance of paragraph (1) to be generally acceptable.

Paragraph (2)

108. While there was agreement in the Working Group on the substance of paragraph (2), the concern was expressed that paragraph (2) in its present formulation might cover elements of information associated with a data record, in addition to endorsements subsequent to the creation of a data record. It was stated that such elements, e.g., information regarding the history of the transmission or the storage of a data record, should not be regarded as material under draft article 8, particularly in view of the fact that, in the context of paper-based communications, they would not be necessary for the admission of a document in court as an original. It was suggested to revise paragraph (2) along the following lines:

"(2) For the purpose of paragraph (1):

"(a) the criteria for assessing integrity are whether the information has remained complete and whether any material alterations have been made to the information; and

"(b) (subparagraph (b) would remain unchanged).

"(3) For the purpose of this article, any alteration is material other than:

"(a) any endorsement made for the purpose of transferring any rights or obligations which form part of the information; or

"(b) any alteration made for the purpose of recording, storing or communicating the information in the form of a data record, or which is a necessary consequence of any procedure for protecting the security and integrity of the information."

109. A concern was expressed that the opening words of the proposed text would render paragraph (2) applicable to paragraph (1) as a whole, and not only to subparagraph (b) of paragraph (1) as envisaged in the current text. It was stated that the reference in the new paragraph (3) to any alteration being material might create impediments to the free admissibility of a data record as an original. In response, it was stated that such an objection might be accommodated by retaining the opening words in the original text. In addition, it was pointed out that the original text provided for only one category of permissible alterations, i.e., endorsements. The effect of that provision was that, under the current text, any alteration might result in a data record being considered unreliable and thus being denied the character of an original. In addition, it was observed that the proposed text would enhance the admissibility of a data record as an original, to the extent that it added a new category of permissible alterations, namely, alterations made in the course of storing or transmitting data records. The prevailing view, however, was that the proposed text might affect the balance of the existing text, which had been achieved after considerable discussion in the Working Group. After discussion, the Working Group decided that the substance of paragraph (2) should remain unchanged.

Paragraph (3)

110. The Working Group found the substance of paragraph (3) to be generally acceptable.

Article 9. Admissibility and evidential value of a data [record]

111. The text of draft article 9 as considered by the Working Group was as follows:

"(1) In any legal proceedings, nothing in the application of the rules of evidence shall apply so as to prevent the admission of a data [record] in evidence

"(a) on the grounds that it is a data [record]; or,

"(b) if it is the best evidence that the person adducing it could reasonably be expected to obtain, on the grounds that it is not an original document.

"(2) Information presented in the form of a data [record] shall be given due evidential weight. In assessing the evidential weight of a data [record], regard shall be had to the reliability of the manner in which the data [record] was generated, stored or communicated, to the reliability of the manner in which the information was authenticated and to any other relevant factor.

"(3) Subject to any other rule of law, where subparagraph (b) of paragraph (1) of article 8 is satisfied in relation to information in the form of a data [record], the information shall not be accorded any less weight in any legal proceedings on the grounds that it is not presented in the form of an original record."

112. The concern was expressed that the "best evidence rule" embodied in subparagraph (b) and referred to in paragraph (3) of draft article 9 could raise a great deal of uncertainty in legal systems in which such a rule was unknown. It was therefore suggested that it might be necessary to put subparagraph (b) in a footnote, so as to allow certain States to enact the model statutory provisions without subparagraph (b). While there was agreement in the Working Group that the concern was

legitimate, it was felt that it could be satisfactorily met by a clarification in a guide to enactment which was to be prepared at a later stage.

113. After discussion, the Working Group approved the substance of draft article 9 unchanged and referred it to the drafting group.

CHAPTER III. COMMUNICATION OF DATA [RECORDS] (Continued)

Article 10. [Effectiveness] [Obligations binding on the originator] of a data [record]

114. The text of draft article 10 as considered by the Working Group was as follows:

"(1) As between the originator and the addressee, an originator is [deemed] [presumed] to have approved the [content] [communication] of a data [record] if it was [issued] [transmitted] by the originator or by another person who had the authority to act on behalf of the originator in respect of that data [record].

"[(2) As between the originator and the addressee, a data [record] is [deemed] [presumed] to be that of the originator if the addressee properly applied a procedure previously agreed with the originator for verifying that the data [record] was the data [record] of the latter.]

"[(3) An originator who is not [deemed] [presumed] to have approved the data [record] by virtue of paragraph (1) or (2) of this article is [deemed] [presumed] to have done so by virtue of this paragraph if:

"(a) the data [record] as received by the addressee resulted from the actions of a person whose relationship with the originator or with any agent of the originator enabled that person to gain access to the authentication procedure of the originator; or

"(b) the addressee verified the authentication by a method which was reasonable in the circumstances.]

"[(4) The originator and the addressee of a data [record] are permitted to agree that an originator may be [deemed] [presumed] to have approved the data [record] although the authentication is not [commercially] reasonable in the circumstances.]

"[(5) Where an originator is [deemed] [presumed] to have approved the content of a data [record] under this article, it is [deemed] [presumed] to have approved the content of the data [record] as received by the addressee. However, where a data [record] contains an error, or duplicates in error a previous [record], the originator is not [deemed] [presumed] to have approved the content of the data [record] by virtue of this article in so far as the data [record] was erroneous, if the addressee knew of the error or the error would have been apparent, had the addressee exercised reasonable care or used any agreed procedure of verification.]

"[(5)bis Paragraph (5) of this article applies to an error or discrepancy in an amendment or a revocation message as it applies to an error or discrepancy in a data [record]].

"[(6) The fact that a data [record] is [deemed] [presumed] to be effective as that of the originator does not impart legal significance to that data [record].]"

Paragraph (1)

General remarks

115. There was agreement in the Working Group that the main purpose of paragraph (1) was to set out the conditions under which a data record could be attributed to its originator, and not to deal with the approval of the content of the communication by the originator. In order to align the language of paragraph (1) with that purpose, it was suggested to replace the words "to have approved the [content] [communication] of a data [record]" with language along the following lines: "to be that of the originator". As to the exact formulation of paragraph (1), a suggestion was made that the terms "actual or apparent" should be added after the term "authority", in order to protect the interests of an addressee who had relied on the apparent authority of another person to act on behalf of the originator, whether that authority was actual or not.

"[deemed] [presumed]"

116. It was generally felt that the term "deemed" was preferable since it was in line with the ordinary law of agency in accordance to which an authorized agent could bind, and not merely be presumed to bind, the principal.

"[issued] [transmitted]"

117. The term "transmitted" was widely supported in the Working Group on the ground that it better conveyed the notion that the issue of the attribution of the data record to the originator involved the communication of a data record from an originator to an addressee.

118. The Working Group approved the substance of paragraph (1) and referred the proposals to the drafting group.

Paragraph (2)

General remarks

119. Various concerns were expressed with respect to paragraph (2) in general. One concern was that paragraph (2) in its present formulation might make it insufficiently clear that a data message could be attributed to the originator if the addressee applied agreed authentication procedures and such application resulted in the proper verification of the originator as the source of the message. Another concern was expressed that paragraph (2) might, in effect, duplicate paragraph (4).

"[deemed] [presumed]"

120. Differing views were expressed as to which term was preferable. One view was that the term "deemed" should be preferred. It was stated that paragraph (2) was, in fact, intended to provide a rule of estoppel under which an addressee would be protected in cases where there existed evidence that the apparent originator had not sent the message. It was suggested that, if the provision was to be interpreted in the nature of an estoppel, the word "deemed" should be preferred and paragraph (2) would need to be restructured. It was stated that, in any case, the provision in paragraph (2) should expressly state that it applied only where the addressee had relied on the procedure it applied for verifying that the message was that of the originator. The prevailing view was that the structure of paragraph (2) should be maintained. The prevailing view was that expressing paragraph (2) in the form of a "deem" provision might be too onerous on the originator, since it would result in the originator having to prove fraud in order to establish that it did not send the message, a burden of

proof that might be too difficult to meet. It was stated that the purpose of paragraph (2), which was to provide some protection for the addressee if the apparent originator did not send the message, could be fulfilled by a rebuttable presumption indicated by the term "presumed". After discussion, the Working Group decided to retain the word "presumed".

"properly applied a procedure previously agreed"

121. A number of concerns and suggestions were expressed with regard to the words "properly applied a procedure previously agreed". One concern was that the words "properly applied" made it insufficiently clear that paragraph (2) should only apply where the procedure which had been applied had produced a positive result. Another concern was that paragraph (2) should cover not only the situation where an authentication procedure had been agreed upon by the originator and the addressee but also situations where an originator, unilaterally or as a result of an agreement with an intermediary, identified a procedure and agreed to be bound by a data message that met the requirements corresponding to that procedure. In order to meet that concern, a number of suggestions were made. One suggestion was to insert after the term "originator" language along the following lines: " if it is identified as such in any manner previously declared by the addressee to be sufficient or the addressee properly verified that the message was that of the originator." Another suggestion was to insert after the word "agreed" the words "or adopted by". As a matter of drafting, another concern was that it might be too cumbersome to refer to a "procedure", which might be interpreted as necessarily implying an elaborate process on the part of the addressee. In order to meet that concern, it was suggested to add to the term "procedure" the terms "technique or practice".

122. After discussion, the Working Group approved the substance of paragraph (2) and referred the above-mentioned suggestions and concerns to the drafting group.

Paragraph (3)

Opening words

123. The Working Group noted that the opening words of paragraph (3) would have to be revised by the drafting group in order to reflect decisions taken with respect to paragraphs (1) and (2).

Subparagraphs (a) and (b)

124. Differing views were expressed as to whether subparagraph (a) should be retained. One view was that subparagraph (a) should be deleted on the grounds that it seemed illogical to provide for a rebuttable presumption in a case where it was clear that the originator had not authorized or sent the message. In addition, it was pointed out that such a provision would be inappropriate since it would run counter to the ordinary law of agency. The prevailing view, however, was that paragraph (3) was an important provision and should be retained, to cover cases in which the originator by its negligence had allowed a third party to gain access to its authentication procedures. It was pointed out that there was a need to protect an addressee who had relied on a message and the appearance that it was sent by the originator since there was considerable uncertainty in the various legal systems in that regard.

125. With respect to the exact formulation of subparagraph (a), it was generally felt that, for reasons expressed in the context of the discussion of paragraph (2) (see above, para. 120), the word "presumed" should be retained. A concern was expressed that, under the current formulation of paragraph (3), an originator might be bound by a data message even where the addressee did not properly apply the authentication procedure. With a view to addressing that concern, it was suggested that paragraph (3) should include wording limiting its effect, in situations where the agreed procedure was not used by the addressee, to cases where the authentication procedure, had it been applied, would

have resulted in the rejection of the message. A proposal was made to insert at the end of paragraph (3) language along the lines of the last sentence of paragraph (5), in order to prevent the protection of an addressee who, in fact, was, or should have been, aware of the actual origin of the message. General support was expressed in favour of that suggestion.

126. A number of drafting proposals were made. One proposal was to insert after the word "access to" the words "or otherwise compromise", since gaining access to the authentication procedure of the addressee was only one of many ways of rendering the authentication procedures of the originator ineffective. Another proposal was to substitute for the words "authentication procedure of the originator" the words "applicable authentication procedures", so as to cover authentication procedures of third-party service providers.

127. After discussion, the Working Group approved the substance of paragraph (3) and referred the proposals to the drafting group.

Paragraph (4)

128. It was generally felt that paragraph (4) was unnecessary and should be deleted.

Paragraph (5)

129. Differing views were expressed as to whether paragraph (5) should be retained. In support of deletion, it was stated that, in case of a discrepancy in a data message between the message as sent and the message as received, any protection afforded to the addressee (e.g., where an originator disavowed part of the content of a data message) should be made conditional on the message being attributable to the originator under other provisions of draft article 10 and the addressee having reasonably relied on the message. It was observed that that was not the case in the present formulation of paragraph (5) and that, in addition, it might seem illogical to provide for a rebuttable presumption that the originator sent the message since paragraph (5) was predicated on the premise that the originator did not send the message. The prevailing view, however, was that paragraph (5) was useful and should be retained. In support of retention, it was stated that paragraph (5) was intended to preclude the originator from disavowing the message once it was sent, unless the addressee knew, or should have known, that the data message was not that of the originator. It was also stated that paragraph (5) was intended to deal with errors in the content of the message arising from errors in transmission. The Working Group approved the substance of paragraph (5) and referred it to the drafting group for the necessary revisions so as to be brought in line with paragraphs (1), (2) and (3) as approved by the Working Group.

Paragraph (5 bis)

130. The Working Group noted that paragraph (5 bis) originated from article 5 of the UNCITRAL Model Law on International Credit Transfers, which provided that a rule along the lines of paragraph (5) applied to errors or discrepancies in revocations of, or amendments to, payment orders. Differing views were expressed as to whether paragraph (5 bis) should be retained. In favour of retention, it was stated that paragraph (5 bis) served a useful purpose in that it clarified whether errors in revocations or amendments of data records were to be treated as data records. The widely prevailing view, however, was that paragraph (5 bis) was superfluous since a revocation or amendment of a data record was clearly a data record under draft article 2, if sent electronically, and not a data record if sent in the form of a paper communication. After discussion, the Working Group decided to delete paragraph (5 bis), on the assumption that it would be made clear in the definition of "data record" contained in draft article 2 that amendments and revocations of data records were covered. The matter was referred to the drafting group.

Paragraph (6)

131. Differing views were expressed as to whether paragraph (6) should be retained. In support of deletion, it was argued that the meaning of the term "legal significance" was not clear and could raise uncertainty. The view was also expressed that draft article 10 did, in fact, deal with the legal significance of a data record. The prevailing view, however, was that the principle embodied in paragraph (6), namely that the attribution of the authorship of the message to the originator should not interfere with the legal consequences of the message, to be determined by applicable law, was important and should be retained. The Working Group approved language along the following lines: "Once a data record is deemed or presumed to be that of the originator, any further legal effect will be determined by this Law and other applicable law", and referred paragraph (6) to the drafting group.

CHAPTER I. GENERAL PROVISIONS
(Continued)

Article 2. Definitions

132. The text of draft article 2 as considered by the Working Group was as follows:

"For the purposes of these statutory provisions:

"(a) 'Data [record]'" means information [generated], stored or communicated by electronic, optical or analogous means including, but not limited to, electronic data interchange (EDI), electronic mail, telegram, telex or telecopy;

"(b) 'Electronic data interchange (EDI)' means the [computerized transmission] [electronic interchange] of structured data between independent [computer] [information] systems;

"(c) 'Originator' of a data [record] means a person other than one acting as an intermediary with respect to that data [record], on whose behalf the data [record] purports to have been generated, stored or communicated;

"(d) 'Addressee' of a data [record] means a person other than one acting as an intermediary with respect to that data [record], who is intended by the originator to receive the data [record];

"(e) 'Intermediary', with respect to a particular data [record], means a person who, as an ordinary part of its business, engages in receiving data [records] and forwarding such data [records] to their addressees or to other intermediaries. [An intermediary may, in addition, provide such services as, [inter alia], formatting, translating, recording, preserving and storing data [records]].

"[(f) 'Record'

"Variant A means the form in which information is preserved for subsequent reference.

"Variant B means a representation of data that is susceptible of accurate reproduction at a later time.

"Variant C means a durable representation of information, either in, or capable of being converted into, a perceivable form.]"

Subparagraph (a) (Definition of "Data [record] [message]")

133. Differing views and concerns were expressed regarding the choice to be made by the Working Group between the terms "data record" and "data message". On the one hand, the concern was expressed that the word "message" might suggest the exclusion of data that was merely stored, while on the other hand the word "record" might be read as excluding data that was communicated. Another concern was expressed that the word "record" might cause some uncertainty in some languages and it was suggested that it should be replaced by the word "message". After deliberation, the Working Group decided to retain the term "data message", which was understood to encompass the case of computer-generated records that were not intended for communication. It was understood that other provisions of the draft Model Law might need to be adjusted to cover such records more explicitly.

134. The view was expressed that language should be added in the definition of "data message" to make it clear that it covered the case of revocation or amendment of a data message (see above, para. 130). It was generally felt that, provided that the revocation or amendment was itself contained in a data message, it would be covered by the existing definition. It was decided, however, that that point should be clearly indicated in the guide to enactment of the draft Model Law, to be prepared at a later stage.

135. After discussion, the Working Group adopted the substance of the definition of "data message" and referred it to the drafting group.

Subparagraph (b) (Definition of "Electronic data interchange (EDI)")

136. The Working Group agreed that subparagraph (b) should be brought in line with the concept of "EDI" used by the Economic Commission for Europe (ECE) in the context of UN/EDIFACT. [5/] The following text was proposed: "EDI means the electronic transfer from computer to computer of commercial information using an agreed standard to structure the message or data". It was noted that, in view of the Working Group decision not to limit the application of the draft Model Law to commercial or any other type of information (see above, para. 83), there was no need to refer to "commercial or administrative" data as in the UN/EDIFACT definition of EDI. A concern was expressed that the word "electronic" might be inappropriate in view of the possible future development of computers based on non-electronic techniques. It was widely felt, however, that such possible developments were sufficiently covered by the definition of "data message" and that no attempt should be made to introduce in the draft Model Law a definition of "EDI" that would deviate from established uses. After discussion, the Working Group adopted the substance of the proposal and referred it to the drafting group.

Subparagraph (c) (Definition of "Originator")

137. The Working Group noted that the text of the subparagraph reflected decisions that had been made at its previous session (A/CN.9/390, paras. 53-58). It then proceeded to consider further various elements of the definition, largely from the standpoint of drafting.

"originator"

138. The concern was expressed that, in some languages, it might be more appropriate to use the term

"sender" rather than the term "originator". In order to meet that concern, the suggestion was made to add the term "sender" to the term "originator". It was generally felt, however, that such an addition would run counter to a decision already taken at the previous session (A/CN.9/390, para. 54) and, if adopted, might seriously compromise the economy of the text. It was agreed that the concept of "originator" should be retained.

"person"

139. With respect to the notion of "person" used in the draft definition, a number of concerns were expressed. One concern was that in some languages the term "person" did not make it sufficiently clear that both natural persons and legal entities were meant. In order to address that concern, the suggestion was made to add after "person" the words "or legal entity", or to include in draft article 2 a definition of the term "person". Another concern was that the use of the term "person" might not be sufficient so as to indicate that messages that were generated automatically by computers without direct human intervention were covered by subparagraph (c). It was therefore suggested that the words "or device" should be added next to the term "person".

140. In response to those concerns and suggestions, it was recalled that the same discussion had taken place at the previous session of the Working Group (A/CN.9/390, para. 57). It was noted that the notion of "person" had been used in previous UNCITRAL texts, apparently without giving rise to difficulties. It was also noted that, should the model statutory provisions deviate from the use of the notion of "person" or introduce a definition of the notion of "person", difficulties might arise with respect to the interpretation of other UNCITRAL texts. The view was expressed that, in most legal systems, the notion of "person" was used to designate the subjects of rights and obligations and was consistently interpreted as covering both natural persons and corporate bodies. With regard to the possible reference to a "device", there was general agreement that the draft Model Law should be so drafted that it could not be misinterpreted as allowing for a computer to be made the subject of rights and obligations. It was recalled that messages that were generated automatically by computers without direct human intervention should be clearly regarded as "originating" from the legal entity on behalf of which the computer was operated. It was observed that the words "on whose behalf" sufficiently indicated that a device might generate, store or communicate data messages.

141. While it was generally felt that no addition was necessary with regard to the term "person" in the text of the model statutory rules, it was agreed that it would be useful to elaborate on this matter in the guide to enactment to be prepared at a later stage.

"on whose behalf"

142. The view was expressed that the words "on whose behalf" might be interpreted as excluding the originator itself. In order to avoid such misinterpretation, it was agreed that the words "by whom or" should be inserted before the words "on whose behalf".

"stored"

143. The concern was expressed that use of the word "stored" might have the unintended effect of covering the addressee or an intermediary who might store information on behalf of the originator. It was therefore suggested that the term "stored" should be deleted. While some support was expressed in favour of the suggestion, the prevailing view was that the substance of the text should remain unchanged in that respect, since the term "stored" was important to indicate that a message did not have to be communicated in order to fall within the scope of the draft Model Law.

144. After discussion, the Working Group found the substance of subparagraph (c) to be generally

acceptable, subject to the above-mentioned addition (see above, para. 142) and it referred the matter to the drafting group.

Subparagraph (d) (Definition of "Addressee")

145. The Working Group approved the substance of subparagraph (d) unchanged.

Subparagraph (e) (Definition of "Intermediary")

146. Differing views were expressed as to whether the definition of "intermediary" should be retained. In support of deletion, it was argued that the definition of "intermediary" was no longer necessary since, after the decision of the Working Group to substitute in draft article 14 for "intermediary" the words "any third party", there was no reference in the text to "intermediary". In addition, it was pointed out that such a deletion would be in line with a decision made at a previous session that the focus of the draft Model Law should be on the relationship between the originator and the addressee, and not on the relationship between either the originator or the addressee and any intermediary. Moreover, it was observed that, if a clarification of the meaning of "intermediary" was considered to be necessary, it could be included in the guide to enactment.

147. The prevailing view, however, was that the definition of "intermediary" was important and should be retained. It was stated that the term "intermediary" did appear in the text in the context of subparagraphs (c) and (d) of draft article 2, where it was needed to establish the necessary distinction between originators or addressees and third parties. In addition, it was generally agreed that a set of rules on electronic communications could not ignore the paramount importance of intermediaries in that field, a reason for which the Working Group decided that, contrary to its earlier decision regarding draft article 14, a reference to "intermediary" should also be reintroduced in that draft article.

148. With regard to the exact formulation of subparagraph (e), a number of concerns and suggestions were expressed.

"as an ordinary part of its business"

149. Differing views were expressed as to whether the expression "as an ordinary part of its business" should be retained. One view was that it should be retained in order to indicate that, since the focus of the draft Model Law should be on business transactions, a person who merely forwarded or stored data on an occasional or circumstantial basis should not fall within the definition of an intermediary for the purpose of the draft Model Law. Another view was that the expression "as an ordinary part of its business" should be deleted. It was stated that the expression might lend itself to circumvention. It was pointed out that in its present formulation subparagraph (e) would fail to cover intermediaries, merely on the ground that transmitting, storing and receiving services might be an incidental and not an ordinary part of their business. The prevailing view was that the definition of "intermediary" should be sufficiently broad to cover any person, other than the originator and the addressee, who performed any of the functions of an intermediary. It was agreed that the expression "as an ordinary part of its business" should be replaced by the expression "on behalf of a person".

Second sentence

150. Views were exchanged as to the second sentence of subparagraph (e), which set forth a non-exhaustive list of value-added services that might be provided by an intermediary. One view was that the second sentence should be deleted since the value-added services referred to therein were outside the message-transmission chain and therefore did not involve rights and obligations of concern to the

draft Model Law. In that connection, it was suggested that the fundamental functions performed by intermediaries, namely transmitting, storing and receiving information, could be reflected in the first sentence of the definition, while an illustrative list of other functions would more appropriately be contained in the guide to enactment than in the draft Model Law itself. The prevailing view, however, was that the definition of "intermediary" should recognize the fact that value-added services performed an increasingly important commercial function. As to how reference to those value-added services should be formulated, it was agreed that the second sentence should be replaced by an overall reference in the first sentence to "other services" provided with respect to data messages. It was also agreed that the first sentence should expressly list the main services provided by intermediaries, namely, receipt, forwarding and storage of data messages.

Subparagraph (f) (Definition of "Record")

151. The view was expressed that the definition of "record" should be combined with that of "data message". It was suggested that wording from subparagraph (f) should be included in the definition of "data message", as an additional reference to the "form" of the information contained in a data message. The prevailing view, however, was that the definition of "record", as well as the suggested combination of subparagraphs (a) and (f), might conflict with the provision regarding the requirements of "writing" under draft article 6. The Working Group was agreed that subparagraph (f) should be deleted, and that the guide to enactment to be prepared at a later stage would make it clear that a definition of "record" in line with the characteristic elements of "writing" under draft article 6 might be used in jurisdictions where such a definition appeared to be necessary.

152. Having completed its review of draft article 2, the Working Group considered possible additional definitions to be included in the draft Model Law.

Definition of "Information system"

153. The suggestion was made that "information system" could be defined along the following lines: "a system for the generation, transmission, receipt or storage of information in electronic, optical or analogous form". While the definition was found to be in principle acceptable, a number of suggestions of a drafting nature were made for its improvement. One suggestion was to refer, for brevity and clarity, to the transmission, receipt or storage of data messages. Another suggestion was to substitute the word "a means of" for the word "a system for" since the information system was merely a set of technical means of transmitting, receiving and storing information. The Working Group approved the substance of the definition and referred the drafting suggestions to the drafting group.

Definition of "Authentication"

154. Differing views were expressed both as to whether a definition of "authentication"was needed, and as to what the substance of such a definition might be. One view was that, in the absence of a definition, there would be some uncertainty as to the exact meaning of the reference to "authentication" in draft articles 9 (2) and 10 (3). In particular, questions might be raised as to whether the reference was to the identification of the source of the data message or the authentication of its content, or a combination of both elements.

155. As to the exact formulation of a possible definition of "authentication", a number of proposals were made. One proposal was to define authentication along the following lines:

> "Authentication means a process by which a communicating party obtains information that gives assurance that a message received from another communicating party:

"(a) originates from that party; and

"(b) is received with [exactly] the same information content as when it was forwarded by that party."

Another proposal was to define authentication along the lines of article 2 (i) of the UNCITRAL Model Law on International Credit Transfers, namely: "authentication means a procedure to determine whether a data message was issued by the person indicated as the originator."

156. It was suggested that the need for a definition of "authentication", as well as the use of the notion itself, might be avoided if the text of draft article 9 (2) was modified to make it clear that the method referred to therein was meant to provide both identification of the originator and assurance as to the integrity of the information. At the same time, it would be necessary to make it clear in the text of draft article 10 (3) that the method referred to was meant to provide mere identification of the originator. After discussion, the Working Group adopted the suggestion and referred the matter to the drafting group.

CONSIDERATION OF DRAFT ARTICLES PRESENTED BY THE DRAFTING GROUP

Article 2. Definitions

Subparagraph (c) (Definition of "Originator")

157. The Working Group considered the following text:

"(c) 'Originator' of a data message means a person by whom, or on whose behalf, the data message purports to have been generated, stored or communicated, but it does not include a person acting as an intermediary with respect to that data message;"

158. A suggestion was made that the text might be understood in the sense that a person could become an originator by the mere fact of having stored a received message. It was pointed out that such a meaning was not intended and that therefore the provision might have to clarify expressly that a person did not become an originator solely by storing a data message received from the originator. It was observed that that result could be achieved by shifting the focus of subparagraph (c) so as to emphasize the generation, rather than the storage or the communication of the message, through the use of language along the lines: "generated, either to be stored or to be communicated". It was generally felt that such language might unnecessarily complicate subparagraph (c). The Working Group approved the substance of subparagraph (c) unchanged.

Subparagraph (f) (Definition of "Information system")

159. The Working Group considered the following text:

"(f) "Information system" means [a system for] [an ensemble of technical means of] generating, transmitting, receiving or storing information in a data message."

160. Differing views were expressed as to whether the term "system" or the term "ensemble of

technical means of" was more appropriate. One view was that the term "system", in contrast with the term "ensemble of technical means of", did not make it sufficiently clear whether a mechanical device was meant, or a methodology. The prevailing view, however, was that the term "system" was simple, generally understood and used in various national laws, and that it sufficiently covered the entire range of hardware, software and communications devices that subparagraph (f) was intended to define. The Working Group approved the substance of subparagraph (c), deleting the term "ensemble of technical means of" and adopting the term "system".

Article 8. Original

Subparagraph (b) of paragraph (1)

161. The Working Group considered the following text:

> "(b) there exists a reliable assurance as to the integrity of the information between the time when it was first composed in its final form [by the originator or on its behalf], as a data message or otherwise, and the time when it is displayed."

162. The Working Group agreed that, for reasons of consistency in terminology, the word "generated" should replace the word "composed". Differing views were expressed as to whether the language in brackets should be retained. In support of retention, it was stated that the bracketed language was needed to make it sufficiently clear that the important time for the determination of the integrity of the data message was the time when the data message was first created by the originator, as opposed to the time when the information contained in the data message was generated, which was said to be irrelevant. The prevailing view, however, was that subparagraph (b) without the bracketed language made it sufficiently clear that the integrity of the data message should not be compromised from the time of the generation of the data message through its handling by the originator, the addressee or any third party. In addition, it was generally felt that removal of the bracketed language was needed to make it clear that the information did not have to be composed by the originator itself to be treated as original information under draft article 8. The Working Group approved the substance of subparagraph (b) of paragraph (1) without the bracketed language.

Subparagraph (a) of paragraph (2)

163. The Working Group considered the following text:

> "(2) Where any question is raised as to whether subparagraph (b) of paragraph (1) of this article is satisfied:
>
> > "(a) the criteria for assessing integrity shall be whether the information has remained complete and, apart from the addition of any endorsement, unaltered; and"

164. The concern was expressed that such a formulation of subparagraph (a) of paragraph (2) failed to take into account that the originality of the data message should not be affected by those changes that were necessary to make the data message legible. In order to address that concern, the Working Group decided to replace the words "complete and, apart from the addition of any endorsement, unaltered" by the words "complete and unaltered, apart from the addition of any endorsement, and any change which arises in the normal course of communication, storage and display".

Article 10. Attribution of data messages

Paragraphs (1), (2) and (3)

165. The Working Group considered the following text:

"(1) As between the originator and the addressee, a data message is deemed to be that of the originator if it was communicated by the originator or by another person who had the authority to act on behalf of the originator in respect of that data message.

"(2) As between the originator and the addressee, a data message is presumed to be that of the originator if the addressee, by properly applying a procedure previously agreed to by the originator, ascertained that the data message was that of the originator.

"(3) Where paragraphs (1) and (2) do not apply, a data message is [deemed] [presumed] to be that of the originator if:

"(a) the data message as received by the addressee resulted from the actions of a person whose relationship with the originator or with any agent of the originator enabled that person to gain access to a method used by the originator to identify data messages as its own; or

"(b) the addressee ascertained that the data message was that of the originator by a method which was reasonable in the circumstances.

"However, subparagraphs (a) and (b) do not apply if the addressee knew, or should have known, had it exercised reasonable care or used any agreed procedure, that the data message was not that of the originator."

166. The view was expressed that the provisions contained in those paragraphs were flawed from the standpoint of logic, since they created a rebuttable presumption that could never arise. That situation was said to result from paragraphs (2) and (3) being predicated on the fact that the data message was not authorized by the originator. In order to address that concern, it was suggested that language along the following lines should be inserted at the end of paragraph (1): "where it has not been established that this paragraph applies, the presumption in paragraphs (2) and (3) may apply". Insufficient support was expressed in favour of the suggestion. The Working Group therefore approved the substance of paragraphs (1), (2) and (3) unchanged.

Article 12. Formation and validity of contracts

Paragraph (1)

167. The Working Group considered the following text:

"(1) In the context of contract formation, unless otherwise agreed by the parties, an offer and the acceptance of an offer may be expressed by means of data records. Where any communication by means of which a contract is formed is a data record, the contract shall not be denied validity or enforceability on the sole ground that it was formed by such means."

168. A concern was expressed that the words "any communication by means of which a contract is formed" might exclude from the scope of the provision messages which could not be regarded as an offer or an acceptance but which preceded or accompanied the offer or the acceptance. After discussion, and bearing in mind the concern, the Working Group approved the text along the following lines: "Where a data message is used in the formation of a contract, that contract shall not be denied validity or enforceability on the sole ground that a data message was used for that purpose."

Article 14. Storage of data records

Paragraph (1)

Opening words

169. The Working Group considered the following text:

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

170. It was noted that the title used the term "storage" but that the text of the draft article and other provisions of the draft Model Law used both "store" and "retain" and derivatives of those terms. It was considered that it was important for the opening words of paragraph (1) to use the term "retaining" since that term was commonly used to refer to requirements established by law to keep documents or records for a certain period of time. Elsewhere in the draft Model Law, depending on the context, the expression "storage" or its derivative might be appropriate.

Subparagraph (a)

171. The Working Group considered the following text:

> "(a) [parallel the conditions in Article 6(1)];"

172. The Working Group agreed to the following formulation of subparagraph (1) (a): "the information contained therein is accessible so as to be usable for subsequent reference".

Subparagraph (b)

173. The Working Group considered the following text:

> "(b) the data record is stored in the transmitted format or in a format which can be demonstrated to represent accurately the transmitted information; and"

174. The Working Group agreed that, for consistency in terminology, subparagraph (b) should be revised to read as follows: " the data message is stored in the format it was generated, transmitted or received or in a format which can be demonstrated to represent accurately the information generated, transmitted or received; and". It was also agreed that paragraph (1) should make it clear that the conditions set out in subparagraphs (a), (b) and (c) had to be met cumulatively.

175. The Working Group reviewed the draft articles of the Model Law as revised by the drafting group. At the conclusion of its deliberation of the draft articles of the Model Law, the Working Group approved the text of the draft Model Law as contained in the annex to this report. [6/]

III. FUTURE WORK

176. The Working Group requested the Secretariat to circulate the text of the draft Model Law to Governments and interested organizations for comments. It was noted that the text of the draft Model Law, together with a compilation of comments by Governments and interested organizations, would be placed before the Commission at its twenty-eighth session for final review and adoption.

177. There was general support for a suggestion that the draft Model Law should be accompanied by a guide to assist States in enacting and applying the draft Model Law. The guide, much of which could be drawn from the travaux préparatoires of the draft Model Law, would also be helpful to EDI users as well as to scholars in the area of EDI. The Working Group noted that, during its deliberations at the current session, it had proceeded on the assumption that the draft Model Law would be accompanied by a guide, to be adopted by the Commission. For example, the Working Group had decided in respect of a number of issues not to settle them in the draft Model Law but to address them in the guide so as to provide guidance to States enacting the draft Model Law. As to the timing and method of preparation of the guide, the Working Group agreed that the Secretariat should prepare a draft and submit it to the Working Group for consideration at its twenty-ninth session.

178. The Working Group noted that its recommendation to the Commission, that preliminary work should be undertaken on the issue of negotiability and transferability of rights in goods in a computer based environment as soon as the draft Model Law was completed (A/CN.9/390, para. 158), had found general support in the Commission. [7/] It was stated that related legal issues involving electronic registries were a necessary part of such a project. The Working Group also reiterated its decision to address, in the context of a future session, the issue of incorporation of terms and conditions into a data message by means of a mere reference to such terms and conditions (see above, para. 90). A view was expressed that a broad approach to the issue of transferability might be preferable, with a view to encompassing the electronic transfer of dematerialized securities. It was observed that, in view of the high degree of regulation at the national level, it might be particularly difficult to achieve uniformity in the field of electronic securities.

179. As to the planning of future work, the view was expressed that the Working Group at its twenty-ninth session, after completing its consideration of the draft guide to enactment to be prepared by the Secretariat, could have a general discussion on negotiability and transferability of right in goods. Another view was that the issue of incorporation by reference could also be considered at the twenty-ninth session for possible inclusion in the draft Model Law. A number of delegations expressed their willingness to prepare a brief paper to facilitate discussions on both topics. It was noted, however, that, while the Working Group might have sufficient time for a general discussion, it could not go into detail on either topic.

180. It was noted that, in line with a decision made by the Commission at its twenty-seventh session [8/], the twenty-ninth session of the Working Group would be held in New York, from 27 February to 10 March 1995.

Notes

[1/] Official Records of the General Assembly, Forty-sixth Session, Supplement No. 17 (A/46/17), paras. 314-317.

[2/] Ibid., Forty-seventh Session, Supplement No. 17 (A/47/17), paras. 140-148.

[3/] Ibid., Forty-eighth Session, Supplement No. 17 (A/48/17), paras. 265-267.

[4/] Ibid., Forty-ninth Session, Supplement No. 17 (A/49/17), paras. 198-201.

[5/] The following definition of EDI was approved by the Working Party on Facilitation of International Trade Procedures (WP.4), at its fortieth session, on 23 September 1994:

> "Electronic Data Interchange (EDI): The electronic transfer from computer to computer of commercial or administrative transactions using an agreed standard to structure the transaction or message data".

(See Report of the fortieth session of the Working Party on Facilitation of International Trade Procedures (TRADE/WP.4/189, para. 36); Report of the fiftieth session of the Meeting of Experts on Data Elements and Automatic Data interchange (TRADE/WP.4/GE.1/97, para. 98); International Standardization Affecting Trade Interchange - ISO Liaison Meeting Report Attachment (TRADE/WP.4/R.1087/Add.1, para. 3.1.3))

[6/] The articles of the draft Model Law were renumbered upon approval of the draft Model Law by the Working Group.

Number of article in draft Model Law	Number of draft article before the Working Group	Number of article in draft Model Law	Number of draft article before the Working Group
1	1	8	9
2	2	9	14
3	3	10	5
4	5 bis	11	10
5	6	12	11
6	7	13	12
7	8	14	13

[7/] Official Records of the General Assembly, Forty-ninth Session, Supplement No. 17 (A/49/17), para. 201.

[8/] Ibid., para. 259.

Annex

DRAFT MODEL LAW ON LEGAL ASPECTS OF ELECTRONIC DATA INTERCHANGE (EDI) AND RELATED MEANS OF COMMUNICATION

(as approved by the UNCITRAL Working Group on Electronic Data Interchange at its twenty-eighth session, held at Vienna, from 3 to 14 October 1994)

CHAPTER I. GENERAL PROVISIONS*

Article 1. Sphere of application**

This Law forms part of commercial*** law. It applies to any kind of information in the form of a data message.

Article 2. Definitions

For the purposes of this Law:

(a) "Data message" means information generated, stored or communicated by electronic, optical or analogous means including, but not limited to, electronic data interchange (EDI), electronic mail, telegram, telex or telecopy;

(b) "Electronic data interchange (EDI)" means the electronic transfer from computer to computer of information using an agreed standard to structure the information;

(c) "Originator" of a data message means a person by whom, or on whose behalf, the data message purports to have been generated, stored or communicated, but it does not include a person acting as an intermediary with respect to that data message;

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* This Law does not override any rule of law intended for the protection of consumers.

** The Commission suggests the following text for States that might wish to limit the applicability of this Law to international data messages:

This Law applies to a data message as defined in paragraph (1) of article 2 where the data message relates to international commerce.

*** The term "commercial" should be given a wide interpretation so as to cover matters arising from all relationships of a commercial nature, whether contractual or not. Relationships of a commercial nature include, but are not limited to, the following transactions: any trade transaction for the supply or exchange of goods or services; distribution agreement; commercial representation or agency; factoring; leasing; construction of works; consulting; engineering; licensing; investment; financing; banking; insurance; exploitation agreement or concession; joint venture and other forms of industrial or business cooperation; carriage of goods or passengers by air, sea, rail or road.

(d) "Addressee" of a data message means a person who is intended by the originator to receive the data message, but does not include a person acting as an intermediary with respect to that data message;

(e) "Intermediary", with respect to a particular data message, means a person who, on behalf of another person, receives, transmits or stores that data message or provides other services with respect to that data message;

(f) "Information system" means a system for generating, transmitting, receiving or storing information in a data message.

Article 3. Interpretation

(1) In the interpretation of this Law, regard is to be had to its international source 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.

CHAPTER II. APPLICATION OF LEGAL REQUIREMENTS TO DATA MESSAGES

Article 4. Legal recognition of data messages

Information shall not be denied legal effectiveness, validity or enforceability solely on the grounds that it is in the form of a data message.

Article 5. Writing

(1) Where a rule of law requires information to be in writing or to be presented in writing, or provides for certain consequences if it is not, a data message satisfies that rule if the information contained therein is accessible so as to be usable for subsequent reference.

(2) The provisions of this article do not apply to the following: [...].

Article 6. Signature

(1) Where a rule of law requires a signature, or provides for certain consequences in the absence of a signature, that rule shall be satisfied in relation to a data message if:

(a) a method is used to identify the originator of the data message and to indicate the originator's approval of the information contained therein; and

(b) that method is as reliable as was appropriate for the purpose for which the data message was generated or communicated, in the light of all the circumstances, including any agreement between the originator and the addressee of the data message.

(2) The provisions of this article do not apply to the following: [...].

Article 7. Original

(1) Where a rule of law requires information to be presented in its original form, or provides for certain consequences if it is not, a data message satisfies that rule if:

(a) that information is displayed to the person to whom it is to be presented; and

(b) there exists a reliable assurance as to the integrity of the information between the time when it was first composed in its final form, as a data message or otherwise, and the time when it is displayed.

(2) Where any question is raised as to whether subparagraph (b) of paragraph (1) of this article is satisfied:

(a) the criteria for assessing integrity shall be whether the information has remained complete and unaltered, apart from the addition of any endorsement and any change which arises in the normal course of communication, storage and display; and

(b) the standard of reliability required shall be assessed in the light of the purpose for which the information was composed and in the light of all the relevant circumstances.

(3) The provisions of this article do not apply to the following: [...].

Article 8. Admissibility and evidential value of data messages

(1) In any legal proceedings, nothing in the application of the rules of evidence shall apply so as to prevent the admission of a data message in evidence:

(a) on the grounds that it is a data message; or,

(b) if it is the best evidence that the person adducing it could reasonably be expected to obtain, on the grounds that it is not in its original form.

(2) Information presented in the form of a data message shall be given due evidential weight. In assessing the evidential weight of a data message, regard shall be had to the reliability of the manner in which the data message was generated, stored or communicated, to the reliability of the manner in which the integrity of the information was maintained, to the manner in which its originator was identified, and to any other relevant factor.

(3) Subject to any other rule of law, where subparagraph (b) of paragraph (1) of article 8 is satisfied in relation to information in the form of a data message, the information shall not be accorded any less weight in any legal proceedings on the grounds that it is not presented in its original form.

Article 9. Retention of data messages

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

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

and

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

(c) transmittal information associated with the data message, including, but not limited to, originator, addressee(s), and date and time of transmission, is retained.

(2) An obligation of an addressee to retain information in accordance with paragraph (1) shall not extend to any part of such information which is transmitted for communication control purposes but which does not enter the information system of, or designated by, the addressee.

(3) A person may satisfy the requirements referred to in paragraph (1) by using the services of any other person, provided that the above conditions are satisfied.

CHAPTER III. COMMUNICATION OF DATA MESSAGES

Article 10. Variation by agreement

As between parties involved in generating, storing, communicating, receiving or otherwise processing data messages, and except as otherwise provided, the provisions of this chapter may be varied by agreement.

Article 11. Attribution of data messages

(1) As between the originator and the addressee, a data message is deemed to be that of the originator if it was communicated by the originator or by another person who had the authority to act on behalf of the originator in respect of that data message.

(2) As between the originator and the addressee, a data message is presumed to be that of the originator if the addressee, by properly applying a procedure previously agreed to by the originator, ascertained that the data message was that of the originator.

(3) Where paragraphs (1) and (2) do not apply, a data message is [deemed] [presumed] to be that of the originator if:

(a) the data message as received by the addressee resulted from the actions of a person whose relationship with the originator or with any agent of the originator enabled that person to gain access to a method used by the originator to identify data messages as its own; or

(b) the addressee ascertained that the data message was that of the originator by a method which was reasonable in the circumstances.

However, subparagraphs (a) and (b) do not apply if the addressee knew, or should have known, had it exercised reasonable care or used any agreed procedure, that the data message was not that of the originator.

(4) Where a data message is deemed or presumed to be that of the originator under this article, the content of the data message is presumed to be that received by the addressee. However, where transmission results in an error in the content of a data message or in the erroneous duplication of a data message, the content of the data message is not presumed to be that received by the addressee in so far as the data message was erroneous, if the addressee knew of the error or the error would have been apparent, had the addressee exercised reasonable care or used any agreed procedure to ascertain the presence of any errors in transmission.

(5) Once a data message is deemed or presumed to be that of the originator, any further legal effect will be determined by this Law and other applicable law.

Article 12. Acknowledgement of receipt

(1) This article applies where, on or before sending a data message, or by means of that data message, the originator has requested an acknowledgement of receipt.

(2) Where the originator has not requested that the acknowledgement be in a particular form, the request for an acknowledgement may be satisfied by any communication or conduct of the addressee sufficient to indicate to the originator that the data message has been received.

(3) Where the originator has stated that the data message is conditional on receipt of that acknowledgement, the data message has no legal effect until the acknowledgement is received.

(4) Where the originator has not stated that the data message is conditional on receipt of the acknowledgement and the acknowledgement has not been received by the originator within the time specified or agreed or, if no time has been specified or agreed, within a reasonable time:

(a) the originator may give notice to the addressee stating that no acknowledgement has been received and specifying a time, which must be reasonable, by which the acknowledgement must be received; and

(b) if the acknowledgement is not received within the time specified in subparagraph (a), the originator may, upon notice to the addressee, treat the data message as though it had never been transmitted, or exercise any other rights it may have.

(5) Where the originator receives an acknowledgement of receipt, it is presumed that the related data message was received by the addressee. Where the received acknowledgement states that the related data message met technical requirements, either agreed upon or set forth in applicable standards, it is presumed that those requirements have been met.

Article 13. Formation and validity of contracts

(1) In the context of contract formation, unless otherwise agreed by the parties, an offer and the acceptance of an offer may be expressed by means of data messages. Where a data message is used in the formation of a contract, that contract shall not be denied validity or enforceability on the sole ground that a data message was used for that purpose.

(2) The provisions of this article do not apply to the following: [...].

Article 14. Time and place of dispatch and receipt of data messages

(1) Unless otherwise agreed between the originator and the addressee of a data message, the dispatch of a data message occurs when it enters an information system outside the control of the originator.

(2) Unless otherwise agreed between the originator and the addressee of a data message, the time of receipt of a data message is determined as follows:

(a) if the addressee has designated an information system for the purpose of receiving such data messages, receipt occurs at the time when the data message enters the designated information system, but if the data message is sent to an information system of the addressee that is not the designated information system, receipt occurs when the data message is retrieved by the addressee;

(b) if the addressee has not designated an information system, receipt occurs when the data message enters an information system of the addressee.

(3) Paragraph (2) applies notwithstanding that the place where the information system is located may be different from the place where the data message is received under paragraph (4).

(4) Unless otherwise agreed between the originator and the addressee of a computerized transmission of a data message, a data message is deemed to be received at the place where the addressee has its place of business, and is deemed to be dispatched at the place where the originator has its place of business. For the purposes of this paragraph:

(a) if the addressee or the originator has more than one place of business, the place of business is that which has the closest relationship to the underlying transaction or, where there is no underlying transaction, the principal place of business;

(b) if the addressee or the originator does not have a place of business, reference is to be made to its habitual residence.

(5) Paragraph (4) shall not apply to the determination of place of receipt or dispatch for the purpose of any administrative, criminal or data-protection law.