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ELECTRONIC DATA INTERCHANGE

Guide to Enactment of the UNCITRAL Model Law on Legal Aspects of Electronic Data Interchange (EDI) and Related Means of Communication

Report of the Secretary-General

1. Pursuant to a decision taken by the Commission at its twenty-fifth session [1/] (1992), the Working Group on Electronic Data Interchange devoted its twenty-fifth to twenty-eighth sessions to the preparation of the draft UNCITRAL Model Law on Legal Aspects of Electronic Data Interchange and Related Means of Communication (hereinafter referred to as "the Model Law"). Reports of those sessions are found in A/CN.9/373, 387, 390 and 406. In preparing the Model Law, the Working Group noted that it would be useful to provide in a commentary additional information concerning the Model Law. In particular, at the twenty-eighth session of the Working Group, during which the text of the draft Model Law was finalized for submission to the Commission, 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 that session, it had proceeded on the assumption that the draft Model Law would be accompanied by a guide. 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 (A/CN.9/406, para. 177).

2. At its twenty-ninth session, the Working Group discussed the draft Guide to Enactment (hereinafter referred to as "the draft Guide") of the Model Law as set forth in a note prepared by the Secretariat (A/CN.9/WG.IV/WP.64) and requested the Secretariat to prepare a revised version of the

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1/ Official Records of the General Assembly, Forty-seventh Session, Supplement No. 17 (A/47/17), paras. 140-148.

draft Guide reflecting the decisions made by the Working Group and taking into account the various views, suggestions and concerns that had been expressed at that session. The report of that session is found in A/CN.9/407.

3. At its twenty-eighth session (1995), the Commission adopted the text of articles 1 and 3 to 11 of the draft Model Law. At the close of the discussion on draft article 11, the Commission noted that it had not completed its consideration of the draft Model Law and decided to place the draft Model Law, together with the draft Guide, on the agenda of the current session. It was agreed that the discussion should be resumed at the current session of the Commission with a view to finalizing the text of the Model Law and adopting the Guide at that session.

4. The annex to the present note contains the revised text of the draft Guide prepared by the Secretariat.

ANNEX

Revised text of the draft Guide to Enactment of the
UNCITRAL Model Law on Legal Aspects of Electronic Data Interchange
(EDI) and Related Means of Communication *

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* The draft Guide is geared to the text of the draft Model Law as adopted by the Commission at its twenty-eighth session (articles 1 and 3 to 11) and to the text as established by the Working Group upon the conclusion of its twenty-eighth session (draft articles 2 and 12 to 14). Once the Commission has completed its review and adoption of the Model Law, it is the intention of the Secretariat to finalize the Guide to take account of the deliberations and decisions of the Commission. For the convenience of the reader, it may be preferable to publish the text of the Model Law together with the Guide. This has not been done in the present document due to the availability to Commission of the text of the draft Model Law as Annex II to document A/50/17.

HISTORY AND BACKGROUND OF THE MODEL LAW

1. The UNCITRAL Model Law on Legal Aspects of Electronic Data Interchange (EDI) and Related Means of Communication (hereinafter referred to as "the Model Law") was adopted by the United Nations Commission on International Trade Law (UNCITRAL) in 1996 in furtherance of its mandate to promote the harmonization and unification of international trade law, so as to remove unnecessary obstacles to international trade caused by inadequacies and divergences in the law affecting trade. Over the past quarter of a century, UNCITRAL, whose membership consists of States from all regions and of all levels of economic development, has implemented its mandate by formulating international conventions (the United Nations Conventions on Contracts for the International Sale of Goods, on the Limitation Period in the International Sale of Goods, on the Carriage of Goods by Sea, 1978 ("Hamburg Rules"), on the Liability of Operators of Transport Terminals in International Trade, on International Bills of Exchange and International Promissory Notes, and on Independent Guarantees and Stand-by Letters of Credit), model laws (the UNCITRAL Model Laws on International Commercial Arbitration, on International Credit Transfers and on Procurement of Goods, Construction and Services), the UNCITRAL Arbitration Rules, the UNCITRAL Conciliation Rules, and legal guides (on construction contracts, countertrade transactions and electronic funds transfers).

2. The Mode Law was prepared in response to a major change in the means by which communications are made between parties using computerized or other modern techniques in doing business (sometimes referred to as "trading partners"). The Model Law is intended to serve as a model to countries for the evaluation and modernization of certain aspects of their laws and practices in the field of commercial relationships involving the use of computerized or other modern communication techniques, and for the establishment of relevant legislation where none presently exists. The text of the Model Law is set forth in annex I to the report of UNCITRAL on the work of its twenty-ninth session. [1/]

3. The Commission, at its seventeenth session (1984), considered a report of the Secretary-General entitled "Legal aspects of automatic data processing" (A/CN.9/254), which identified several legal issues relating to the legal value of computer records, the requirement of a "writing", authentication, general conditions, liability and bills of lading. The Commission took note of a report of the Working Party on Facilitation of International Trade Procedures (WP.4), which is jointly sponsored by the Economic Commission for Europe and the United Nations Conference on Trade and Development, and is responsible for the development of UN/EDIFACT standard messages. That report suggested that, since the legal problems arising in this field were essentially those of international trade law, the Commission as the core legal body in the field of international trade law appeared to be the appropriate central forum to undertake and co-ordinate the necessary action. [2/] The Commission decided to place the subject of the legal implications of automatic data processing to the flow of international trade on its programme of work as a priority item. [3/]

[1/] Official Records of the General Assembly, Fifty-first Session, Supplement No. 17 (A/51/17), paras ... .

[2/] "Legal aspects of automatic trade data interchange" (TRADE/WP.4/R.185/Rev.1). The report submitted to the Working Party is reproduced in A/CN.9/238, annex.

[3/] Official Records of the General Assembly, Thirty-ninth Session, Supplement No. 17 (A/39/17), para. 136.

4. At its eighteenth session (1985), the Commission had before it a report by the Secretariat entitled "Legal value of computer records" (A/CN.9/265). That report came to the conclusion that, on a global level, there were fewer problems in the use of data stored in computers as evidence in litigation than might have been expected. It noted that a more serious legal obstacle to the use of computers and computer-to-computer telecommunications in international trade arose out of requirements that documents had to be signed or be in paper form. After discussion of the report, the Commission adopted the following recommendation, which expresses some of the principles on which the Model Law is based:

"The United Nations Commission on International Trade Law,

"Noting that the use of automatic data processing (ADP) is about to become firmly established throughout the world in many phases of domestic and international trade as well as in administrative services,

"Noting also that legal rules based upon pre-ADP paper-based means of documenting international trade may create an obstacle to such use of ADP in that they lead to legal insecurity or impede the efficient use of ADP where its use is otherwise justified,

"Noting further with appreciation the efforts of the Council of Europe, the Customs Co-operation Council and the United Nations Economic Commission for Europe to overcome obstacles to the use of ADP in international trade arising out of these legal rules,

"Considering at the same time that there is no need for a unification of the rules of evidence regarding the use of computer records in international trade, in view of the experience showing that substantial differences in the rules of evidence as they apply to the paper-based system of documentation have caused so far no noticeable harm to the development of international trade,

"Considering also that the developments in the use of ADP are creating a desirability in a number of legal systems for an adaptation of existing legal rules to these developments, having due regard, however, to the need to encourage the employment of such ADP means that would provide the same or greater reliability as paper-based documentation,

"1. Recommends to Governments:

"(a) to review the legal rules affecting the use of computer records as evidence in litigation in order to eliminate unnecessary obstacles to their admission, to be assured that the rules are consistent with developments in technology, and to provide appropriate means for a court to evaluate the credibility of the data contained in those records;

"(b) to review legal requirements that certain trade transactions or trade related documents be in writing, whether the written form is a condition to the enforceability or to the validity of the transaction or document, with a view to permitting, where appropriate, the transaction or document to be recorded and transmitted in computer-readable form;

"(c) to review legal requirements of a handwritten signature or other paper-based method of authentication on trade related documents with a view to permitting, where appropriate, the use of electronic means of authentication;

"(d) to review legal requirements that documents for submission to governments be in writing and manually signed with a view to permitting, where appropriate, such documents to be

submitted in computer-readable form to those administrative services which have acquired the necessary equipment and established the necessary procedures;

"2. Recommends to international organizations elaborating legal texts related to trade to take account of the present Recommendation in adopting such texts and, where appropriate, to consider modifying existing legal texts in line with the present Recommendation." [4/]

5. That recommendation (hereinafter referred to as the "1985 UNCITRAL Recommendation") was endorsed by the General Assembly in resolution 40/71, paragraph 5(b), of 11 December 1985 as follows:

"The General Assembly,

"... Calls upon Governments and international organizations to take action, where appropriate, in conformity with the Commission's recommendation so as to ensure legal security in the context of the widest possible use of automated data processing in international trade; ...". [5/]

6. As was pointed out in several documents and meetings involving the international EDI community, e.g. in meetings of WP. 4, there was a general feeling that, in spite of the efforts made through the 1985 UNCITRAL Recommendation, little progress had been made to achieve the removal of the mandatory requirements in national legislation regarding the use of paper and handwritten signatures. It has been suggested by the Norwegian Committee on Trade Procedures (NORPRO) in a letter to the Secretariat that "one reason for this could be that the 1985 UNCITRAL Recommendation advises on the need for legal update, but does not give any indication of how it could be done". In this vein, the Commission considered what follow-up action to the 1985 UNCITRAL Recommendation could usefully be taken so as to enhance the needed modernization of legislation. The decision by UNCITRAL to formulate model legislation on legal issues of electronic data interchange and related means of communication may be regarded as a consequence of the process that led to the adoption by the Commission of the 1985 UNCITRAL Recommendation.

7. At its twenty-first session (1988), the Commission considered a proposal to examine the need to provide for the legal principles that would apply to the formation of international commercial contracts by electronic means. It was noted that there existed no refined legal structure for the important and rapidly growing field of formation of contracts by electronic means and that future work in that area could help to fill a legal vacuum and to reduce uncertainties and difficulties encountered in practice. The Commission requested the Secretariat to prepare a preliminary study on the topic. [6/]

8. At its twenty-third session (1990), the Commission had before it a report entitled "Preliminary study of legal issues related to the formation of contracts by electronic means" (A/CN.9/333). The report summarized work that had been undertaken in the European Communities and in the United States of America on the requirement of a "writing" as well as other issues that had been identified as

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[4/] Official Records of the General Assembly, Fortieth Session, Supplement No. 17 (A/40/17), para. 360.

[5/] Resolution 40/71 was reproduced in United Nations Commission on International Trade Law Yearbook, 1985, vol. XVI, Part One, D. (United Nations publication, Sales No. E.87.V.4).

[6/] Official Records of the General Assembly, Forty-third Session, Supplement No. 17 (A/43/17), paras. 46 and 47, and ibid., Forty-fourth Session, Supplement No. 17 (A/44/17), para. 289.

arising in the formation of contracts by electronic means. The efforts to overcome some of those problems by the use of model communication agreements were also discussed. [7/]

9. At its twenty-fourth session (1991), the Commission had before a report entitled "Electronic Data Interchange" (A/CN.9/350). The report described the current activities in the various organizations involved in the legal issues of electronic data interchange (EDI) and analysed the contents of a number of standard interchange agreements already developed or then being developed. It pointed out that such documents varied considerably according to the various needs of the different categories of users they were intended to serve and that the variety of contractual arrangements had sometimes been described as hindering the development of a satisfactory legal framework for the business use of EDI. It suggested that there was a need for a general framework that would identify the issues and provide a set of legal principles and basic legal rules governing communication through EDI. It concluded that such a basic framework could, to a certain extent, be created by contractual arrangements between parties to an EDI relationship and that the existing contractual frameworks that were proposed to the community of EDI users were often incomplete, mutually incompatible, and inappropriate for international use since they relied to a large extent upon the structures of local law.

10. With a view to achieving the harmonization of basic EDI rules for the promotion of EDI in international trade, the report suggested that the Commission might wish to consider the desirability of preparing a standard communication agreement for use in international trade. It pointed out that work by the Commission in this field would be of particular importance since it would involve participation of all legal systems, including those of developing countries that were already or would soon be confronted with the issues of EDI.

11. The Commission was agreed that the legal issues of EDI would become increasingly important as the use of EDI developed and that it should undertake work in that field. There was wide support for the suggestion that the Commission should undertake the preparation of a set of legal principles and basic legal rules governing communication through EDI.[8/] The Commission came to the conclusion that it would be premature to engage immediately in the preparation of a standard communication agreement and that it might be preferable to monitor developments in other organizations, particularly the Commission of the European Communities and the Economic Commission for Europe. It was pointed out that high-speed electronic commerce required a new examination of basic contract issues such as offer and acceptance, and that consideration should be given to legal implications of the role of central data managers in international commercial law.

12. After deliberation, the Commission decided that a session of the Working Group on International Payments would be devoted to identifying the legal issues involved and to considering possible statutory provisions, and that the Working Group would report to the Commission on the desirability and feasibility of undertaking further work such as the preparation of a standard communication agreement.[9/]

[7/] Ibid., Forty-fifth Session, Supplement No. 17 (A/45/17), paras. 38 to 40.

[8/] It may be noted that the Model Law is not intended to provide a comprehensive set of rules governing all aspects of communication through EDI. The main purpose of the Model Law is to adapt existing statutory requirements so that they would no longer constitute obstacles to the use of EDI and related means of communication.

[9/] Ibid., Forty-sixth Session, Supplement No. 17 (A/46/17), paras. 311 to 317.

13. The Working Group on International Payments, at its twenty-fourth session, recommended that the Commission should undertake work towards establishing uniform legal rules on EDI. It was agreed that the goals of such work should be to facilitate the increased use of EDI and to meet the need for statutory provisions to be developed in the field of EDI, particularly with respect to such issues as formation of contracts; risk and liability of commercial partners and third-party service providers involved in EDI relationships; extended definitions of "writing" and "original" to be used in an EDI environment; and issues of negotiability and documents of title (A/CN.9/360).

14. While it was generally felt that it was desirable to seek the high degree of legal certainty and harmonization provided by the detailed provisions of a uniform law, it was also felt that care should be taken to preserve a flexible approach to some issues where legislative action might be premature or inappropriate. As an example of such an issue, it was stated that it might be fruitless to attempt providing legislative unification of rules on evidence applicable to EDI messaging. (ibid., para. 130). It was agreed that no decision should be taken at that early stage as to the final form or the final content of the legal rules to be prepared. In line with the flexible approach to be taken, it was noted that situations might arise where the preparation of model contractual clauses would be regarded as an appropriate way of addressing specific issues (ibid., para. 132).

15. The Commission, at its twenty-fifth session (1992), endorsed the recommendation contained in the report of the Working Group (ibid., paras. 129-133) 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. [10/]

16. The Working Group devoted its twenty-fifth to twenty-eighth sessions to the preparation of legal rules applicable to "EDI and related means of communications" (reports of those sessions are found in documents A/CN.9/373, 387, 390 and 406). The notion of "EDI and related means of communication" is not to be construed as a reference to narrowly defined EDI under article 2(b) of the Model Law but to a variety of trade-related uses of modern communication techniques that might be referred to broadly under the rubric of "electronic commerce". The Model Law is not intended only for application in the context of existing communication techniques but rather as a set of flexible rules that should accommodate foreseeable technical developments. It should also be emphasized that the purpose of the Model Law is not only to establish rules for the movement of information communicated by means of data messages but equally to deal with the storage of information in data messages that are not intended for communication.

17. The Working Group noted that, while practical solutions to the legal difficulties raised by the use of EDI were often sought within contracts (A/CN.9/WG.IV/WP.53, paras. 35-36), the contractual approach to EDI was developed not only because of its intrinsic advantages such as its flexibility, but also for lack of specific provisions of statutory or case law. The contractual approach is limited in that it cannot overcome any of the legal obstacles to the use of EDI that might result from mandatory provisions of applicable statutory or case law. In that respect, one difficulty inherent in the use of communication agreements results from uncertainty as to the weight that would be carried by some contractual stipulations in case of litigation. Another limitation to the contractual approach results from the fact that parties to a contract cannot effectively regulate the rights and obligations of third parties. At least for those parties not participating in the contractual arrangement, statutory law based on a model law or an international convention seems to be needed (see A/CN.9/350, para. 107).

10/ Ibid., Forty-seventh Session, Supplement No. 17 (A/47/17), paras. 141 to 148.

18. The Working Group considered preparing uniform rules with the aim of eliminating the legal obstacles to, and uncertainties in, the use of modern communication techniques, where effective removal of such obstacles and uncertainties could only be achieved by statutory provisions. One purpose of the uniform rules is to enable potential EDI users to establish a legally secure EDI relationship by way of a communication agreement within a closed network. The second purpose of the uniform rules is to support the use of EDI outside such a closed network, i.e., in an open environment (e.g., "open-edi"). It should be noted, however, that the aim of the uniform rules is to enable, and not to impose, the use of EDI and related means of communication. It should also be noted that the aim of the Model Law is not to deal with EDI relationships from a technical perspective but to create a legal environment that would be as secure as possible, so as to facilitate the use of EDI between communicating parties.

19. As to the form of the uniform rules, the Working Group was agreed that it should proceed with its work on the assumption that the uniform rules should be prepared in the form of statutory provisions. While it was agreed that the form of the text should be that of a "model law", it was felt, at first, that, owing to the special nature of the legal text being prepared, a more flexible term than "model law" needed to be found. It was observed that the title should reflect that the text contained a variety of provisions relating to existing rules scattered throughout various parts of the national laws in an enacting State. It was thus a possibility that enacting States would not incorporate the text as a whole and that the provisions of such a "model law" might not appear together in any one particular place in the national law. The text could be described, in the parlance of one legal system, as a "miscellaneous statute amendment act". The Working Group agreed that this special nature of the text would be better reflected by the use of the term "model statutory provisions". The view was also expressed that the nature and purpose of the "model statutory provisions" could be explained in an introduction or guidelines accompanying the text.

20. At its twenty-eighth session, however, the Working Group reviewed its earlier decision to formulate a legal text in the form of "model statutory provisions" (A/CN.9/390, para. 16). It was widely felt that the use of the term "model statutory provisions" might raise uncertainties as to the legal nature of the instrument. 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. Depending on the situation in each implementing State, however, the Model Law could be enacted in various ways, either as a single statute or in various pieces of legislation.

21. In preparing and adopting the Model Law, the Commission was mindful that the Model Law would be a more effective tool for States modernizing their legislation if background and explanatory information would be provided to executive branches of Governments and legislators to assist them in using the Model Law. The Commission was also aware of the likelihood that the Model Law would be used in a number of States with limited familiarity with the type of communication techniques considered in the Model Law. The information presented in this Guide is intended to explain why the provisions in the Model Law have been included as essential minimum features of a statutory device designed to achieve the objectives of the Model Law. Such information might assist States also in considering which, if any, of the provisions of the Model Law might have to be varied to take into account particular national circumstances.

I. INTRODUCTION TO THE MODEL LAW

A. Objectives

22. The decision by UNCITRAL to formulate model legislation on EDI and related means of communication was taken in response to the fact that in a number of countries the existing legislation governing communication and storage of information is inadequate or outdated because it does not contemplate the use of EDI and related means of communication. In certain cases, existing legislation imposes or implies restrictions on the use of modern means of communication. While a few countries have adopted specific provisions to deal with certain aspects of EDI, there exists no legislation dealing with EDI and related means of communication as a whole. This may result in uncertainty as to the legal nature and validity of information presented in a form other than a traditional paper-based document. Furthermore, while sound laws and practices are necessary in all countries where the use of EDI and electronic mail is becoming widespread, this need is also felt in many countries with respect to such communication techniques as telecopy and telex.

23. Furthermore, the Model Law may help to remedy disadvantages that stem from the fact that inadequate legislation at the national level creates obstacles to international trade, a significant amount of which is linked to the use of modern communication techniques. Disparities among, and uncertainty about, national legal regimes governing the use of such communication techniques may contribute to limiting the extent to which businesses may access international markets.

24. The objectives of the Model Law, which include enabling, or facilitating, the use of EDI and related means of communication and providing equal treatment to users of paper-based documentation and to users of computer-based information, are essential for fostering economy and efficiency in international trade. By incorporating the procedures prescribed in the Model Law in its national legislation for those situations where parties opt to use electronic means of communication, an enacting State would create a media-neutral environment.

B. Scope

25. The title of the Model Law refers to "EDI and related means of communication". While a definition of "EDI" is provided in article 2, the Model Law does not specify what "related means of communication" are envisaged. In preparing the Model Law, the Commission decided that, in addressing the subject matter before it, it would have in mind a broad notion of EDI, covering a variety of trade-related uses of EDI that might be referred to broadly under the rubric of "electronic commerce" (see A/CN.9/360, paras. 28-29), although other descriptive terms could also be used. Among the means of communication encompassed in the notion of "electronic commerce" are the following modes of transmission based on the use of electronic techniques: communication by means of EDI defined narrowly as the computer-to-computer transmission of data in a standardized format; transmission of electronic messages involving the use of either publicly available standards or proprietary standards; transmission of free-formatted text by electronic means, for example through the INTERNET. It was also noted that, in certain circumstances, the notion of "electronic commerce" might cover the use of techniques such as telex and telecopy.

26. It should be noted that, while the Model Law was drafted with constant reference to the more modern communication techniques, e.g., EDI and electronic mail, the principles on which the Model Law is based, as well as its provisions, are intended to apply also in the context of less advanced communication techniques, such as telecopy. There may exist situations where digitalized information initially dispatched in the form of a standardized EDI message might, at some point in the communication chain between the sender and the recipient, be forwarded in the form of a computer-generated telex or in the form of a telecopy of a computer print-out. A data message may be

initiated as an oral communication and end up in the form of a telecopy, or it may start as a telecopy and end up as an EDI message. A characteristic of EDI and related means of communication is that they cover programmable messages, the computer programming of which is the essential difference between such messages and traditional paper-based documents. Such situations are intended to be covered by the Model Law, based on a consideration of the users' need for a consistent set of rules to govern a variety of communication techniques that might be used interchangeably. More generally, it may be noted that, as a matter of principle, no communication technique is excluded from the scope of the Model Law since future technical developments might need to be accommodated.

27. The objectives of the Model Law are best served by the widest possible application of the Model Law. Thus, although there is provision made in the Model Law for exclusion of certain situations from the scope of articles 5, 6, 7, 13 and 14, an enacting State may well decide not to enact in its legislation substantial restrictions on the scope of application of the Model Law.

C. A "framework" law to be supplemented by technical regulations

28. The Model Law is intended to provide essential procedures and principles for facilitating the use of modern techniques for recording and communicating information in various types of circumstances. However, it is a "framework" law that does not itself set forth all the rules and regulations that may be necessary to implement those techniques in an enacting State. Accordingly, an enacting State may wish to issue regulations to fill in the procedural details for procedures authorized by the Model Law and to take account of the specific, possibly changing, circumstances at play in the enacting State without compromising the objectives of the Model Law.

29. It should be noted that the techniques for recording and communicating information considered in the Model Law, beyond raising matters of procedure to be addressed in the implementing technical regulations, may raise certain legal questions the answers to which will not necessarily be found in the Model Law, but rather in other bodies of law. Such other bodies of law may include, for example, the applicable administrative, contract, criminal and judicial-procedure law, which the Model Law was not intended to deal with.

D. The "functional-equivalent" approach

30. The Model Law is based on the recognition that legal requirements prescribing the use of traditional paper-based documentation constitute the main obstacle to the development of modern means of communication. In the preparation of the Model Law, consideration was given to a possibility of dealing with impediments to the use of EDI posed by such requirements in national laws by way of an extension of the scope of such notions as "writing", "signature" and "original", with a view to encompassing computer-based techniques. Such an approach is used in a number of existing legal instruments, e.g., article 7 of the UNCITRAL Model Law on International Commercial Arbitration and article 13 of the United Nations Convention on Contracts for the International Sale of Goods. It was observed that the Model Law should permit States to adapt their domestic legislation to developments in communications technology applicable to trade law without necessitating the wholesale removal of the paper-based requirements themselves or disturbing the legal concepts and approaches underlying those requirements. At the same time, it was said that the electronic fulfilment of writing requirements might in some cases necessitate the development of new rules. This was due to one of many distinctions between EDI messages and paper-based documents, namely, that the latter were readable by the human eye, while the former were not so readable unless reduced to paper or displayed on a screen.

31. The Model Law thus relies on a new approach, sometimes referred to as the "functional-equivalent approach", which is based on an analysis of the purposes and functions of the traditional paper-based requirement with a view to determining how those purposes or functions could be fulfilled through EDI techniques. For example, among the functions served by a paper document are the following: to provide that a document would be legible by all; to provide that a document would remain unaltered over time; to allow for the reproduction of a document so that each party would hold a copy of the same data; to allow for the authentication of data by means of a signature; and to provide that a document would be in a form acceptable to public authorities and courts. It should be noted that in respect of all of the above-mentioned functions of paper, electronic records can provide the same level of security as paper and, in most cases, a much higher degree of reliability and speed, especially with respect to the identification of the source and content of the data, provided that a number of technical and legal requirements are met. However, the adoption of the functional-equivalent approach should not result in imposing on EDI users more stringent standards of security (and the related costs) than in a paper-based environment.

32. A data message, in and of itself, cannot be regarded as an equivalent of a paper document in that it is of a different nature and does not necessarily perform all conceivable functions of a paper document. That is why the Model Law adopted a flexible standard, taking into account the various layers of existing requirements in a paper-based environment: when adopting the "functional-equivalent" approach, attention was given to the existing hierarchy of form requirements, which provides distinct levels of reliability, traceability and unalterability with respect to paper-based documents. For example, the requirement that data be presented in written form (which constitutes a "threshold requirement") is not to be confused with more stringent requirements such as "signed writing", "signed original" or "authenticated legal act".

33. The Model Law does not attempt to define a computer-based equivalent to any kind of paper document. Instead, it singles out basic functions of paper-based form requirements, with a view to providing criteria which, once they are met by data messages, enable such data messages to enjoy the same level of legal recognition as corresponding paper documents performing the same function. It should be noted that the functional-equivalent approach has been taken in articles 5 to 7 of the Model Law with respect to the concepts of "writing", "signature" and "original" but not with respect to other legal concepts dealt with in the Model Law. For example, article 14 does not attempt to create a functional equivalent of existing storage requirements.

E. Default rules and mandatory law

34. The decision to undertake the preparation of the Model Law was based on the recognition that, in practice, solutions to most of the legal difficulties raised by the use of modern means of communication are sought within contracts. The Model Law embodies the principle of party autonomy in article 10 with respect to the provisions contained in chapter III. Chapter III contains a set of rules of the kind that would typically be found in agreements between parties, e.g., interchange agreements or "system rules". It should be noted that the notion of "system rules" might cover two different categories of rules, namely, general terms provided by communication networks and specific rules that might be included in those general terms to deal with bilateral relationships between originators and addressees of data messages. The Model Law deals only with the narrower category.

35. The rules contained in chapter III may be used by parties as a basis for concluding such agreements. They may also be used to supplement the terms of agreements in cases of gaps or omissions in contractual stipulations. In addition, they may be regarded as setting a basic standard for situations where data messages are exchanged without a previous agreement being entered into by the communicating parties, e.g., in the context of "open-edi".

36. The provisions contained in chapter II are of a different nature. One of the main purposes of the Model Law is to facilitate the use of modern communication techniques and to provide certainty with the use of such techniques where obstacles or uncertainty resulting from statutory provisions could not be avoided by contractual stipulations. The provisions contained in chapter II may, to some extent, be regarded as a collection of exceptions to well-established rules regarding the form of legal transactions. Such well-established rules are normally of a mandatory nature since they generally reflect decisions of public policy. The provisions contained in chapter II should be regarded as stating the minimum acceptable form requirement and are, for that reason, of a mandatory nature, unless expressly stated otherwise in those provisions.

F. Assistance from UNCITRAL secretariat

37. In line with its training and assistance activities, the UNCITRAL secretariat may provide technical consultations for Governments preparing legislation based on the UNCITRAL Model Law on Legal Aspects of Electronic Data Interchange (EDI) and Related Means of Communication, as it may for Governments considering legislation based on other UNCITRAL model laws, or considering adhesion to one of the international trade law conventions prepared by UNCITRAL.

38. Further information concerning the Model Law, as well as the Guide, and other model laws and conventions developed by UNCITRAL, may be obtained from the secretariat at the address below. The secretariat welcomes comments concerning the Model Law and the Guide, as well as information concerning enactment of legislation based on the Model Law.

International Trade Law Branch, Office of Legal Affairs, United Nations
Vienna International Centre P.O. BOX 500 A-1400, Vienna, Austria
Telex: 135612 uno a
Fax: (43-1) 21345-5813 or (43-1) 232156
Phone: (43-1) 21345-4060

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II. ARTICLE-BY-ARTICLE REMARKS

CHAPTER I. GENERAL PROVISIONS

Article 1. Sphere of application

39. The purpose of article 1, which is to be read in conjunction with the definition of "data message" under article 2(a), is to delineate the scope of application of the Model Law. The approach used in the Model Law is to provide in principle for the coverage of all factual situations where information is generated, stored or communicated, irrespective of the medium on which such information may be affixed. It was felt during the preparation of the Model Law that exclusion of any form or medium by way of a limitation in the scope of the Model Law might result in practical difficulties and would run counter to the purpose of providing truly "media-neutral" rules.

40. However, it was also felt that the Model Law should contain an indication that its focus was on the types of situations encountered in the commercial area and that it had been prepared against the background of trade relationships. For that reason, article 1 refers to "commercial activities" and provides, in footnote ***, indications as to what is meant thereby. Such indications, which may be particularly useful for those countries where there does not exist a discrete body of commercial law, are modelled, for reasons of consistency, on the footnote to article 1 of the UNCITRAL Model Law on International Commercial Arbitration. In certain countries, the use of footnotes in a statutory text would not be regarded as acceptable legislative practice. National authorities implementing the Model Law might thus consider the possible inclusion of the text of footnotes in the body of the Law itself.

41. The Model Law applies to all kinds of data messages that might be generated, stored or communicated, and nothing in the Model Law should prevent an implementing State to extend the scope of the Model Law to cover uses of EDI and related means outside the commercial sphere. For example, while the focus of the Model Law is not on the relationships between EDI users and public authorities, the Model Law is not intended to be inapplicable to such relationships. Footnote **** provides for alternative wordings, for possible use by implementing States that would consider it appropriate to extend the scope of the Model Law beyond the commercial sphere.

42. Some countries have special consumer protection laws that may govern certain aspects of the use of information systems. With respect to such consumer legislation, as was the case with previous UNCITRAL instruments (e.g., the UNCITRAL Model Law on International Credit Transfers), it was felt that an indication should be given that the Model Law had been drafted without special attention being given to issues that might arise in the context of consumer protection. At the same time, it was felt that there was no reason why situations involving consumers should be excluded from the scope of the Model Law by way of a general provision, particularly since the provisions of the Model Law might be found appropriate for consumer protection, depending on legislation in each implementing State. Footnote * thus recognizes that any such consumer protection law may take precedence over the provisions in the Model Law. Legislators implementing the Model Law may wish to consider whether the piece of legislation enacting the Model Law should apply to consumers. The question of which individuals or corporate bodies would be regarded as "consumers" is left to applicable law outside the Model Law.

43. Another possible limitation of the scope of the Model Law is contained in the second footnote. In principle, the Model Law applies to both international and domestic uses of data messages. Footnote ** is intended for use by implementing States that might wish to limit the applicability of the Model Law to international cases. It indicates a possible test of internationality for use by those States as a possible criterion for distinguishing international cases from domestic ones. It should be noted,

however, that in some jurisdictions, particularly in federal States, considerable difficulties might arise in distinguishing international trade from domestic trade. The Model Law should not be interpreted as encouraging implementing States to limit its applicability to international cases.

44. It is recommended that application of the Model Law be made as wide as possible. Particular caution should be used in excluding the application of the Model Law by way of a limitation of its scope to international uses of data messages, since such a limitation may be seen as not fully achieving the objectives of the Model Law. Furthermore, the variety of procedures available under the Model Law (particularly articles 5 to 7) to limit the use of data messages if necessary (e.g., for purposes of public policy) may make it less necessary to limit the scope of the Model Law. As the Model Law contains a number of articles (articles 5 to 7) that allow a degree of flexibility to implementing States to limit the scope of application of specific aspects of the Model Law, a narrowing of the scope of application of the text to international trade should not be necessary. Moreover, dividing communications in international trade into purely domestic and international parts might be difficult in practice. Legal certainty to be provided by the Model Law is necessary for both domestic and international trade, and a duality of regimes governing the use of electronic means of recording and communication of data might create a serious obstacle to the use of such means.

References:

A/50/17, paras. 213-219
A/CN.9/407, paras. 37-40
A/CN.9/406, paras. 80-85;
A/CN.9/WG.IV/WP.62, article 1;
A/CN.9/390, paras. 21-43;
A/CN.9/WG.IV/WP.60, article 1;
A/CN.9/387, paras. 15-28;
A/CN.9/WG.IV/WP.57, article 1;
A/CN.9/373, paras. 21-25 and 29-33;
A/CN.9/WG.IV/WP.55, paras. 15-20.

Article 2. Definitions

"Data message"

45. The notion of "data message" is not limited to communication but is also intended to encompass computer-generated records that are not intended for communication. Thus, the notion of "message" includes the notion of "record". However, a definition of "record" in line with the characteristic elements of "writing" in article 5 may be added in jurisdictions where that would appear to be necessary. The reference to "analogous means" is intended to reflect the fact that the Model Law was not intended only for application in the context of existing communication techniques but also to accommodate foreseeable technical developments.

46. The definition of "data message" is also intended to cover the case of revocation or amendment. A data message is presumed to have a fixed information content but it may be revoked or amended by another data message.

"Electronic Data Interchange (EDI)"

47. The definition of EDI is drawn from the definition adopted by the Working Party on Facilitation of International Trade Procedures (WP.4) of the Economic Commission for Europe, which is the United Nations body responsible for the development of UN/EDIFACT technical standards. [11/]

"Originator" and "Addressee"

48. In most legal systems, the notion of "person" is used to designate the subjects of rights and obligations and should be interpreted as covering both natural persons and corporate bodies or other legal entities. Data messages that are generated automatically by computers without direct human intervention are intended to be covered by subparagraph (c). However, the Model Law should not be misinterpreted as allowing for a computer to be made the subject of rights and obligations. Data messages that are generated automatically by computers without direct human intervention should be regarded as "originating" from the legal entity on behalf of which the computer is operated. Questions relevant to agency that might arise in that context are to be settled under rules outside the Model Law.

49. The "addressee" under the Model Law is the person with whom the originator intends to communicate by transmitting the data message, as opposed to any person who might receive, forward or copy the data message in the course of transmission. The "originator" is the person who generated the data message even if that message was transmitted by another person. The definition of "addressee" contrasts with the definition of "originator", which is not focused on intent. It should be noted that, under the definitions of "originator" and "addressee" in the Model Law, the originator and the addressee of a given data message could be the same person, for example in the case where the data message was intended for storage by its author. However, the addressee who stores a message transmitted by an originator is not itself intended to be covered by the definition of "originator".

"Intermediary"

50. The focus of the Model Law is on the relationship between the originator and the addressee, and not on the relationship between either the originator or the addressee and any intermediary. However, the Model Law does not ignore the paramount importance of intermediaries in the field of electronic communications. In addition, the notion of "intermediary" is needed in the Model Law to establish the necessary distinction between originators or addressees and third parties.

51. The definition of "intermediary" is intended to cover both professional and non-professional intermediaries, i.e., any person, other than the originator and the addressee, who performs any of the functions of an intermediary. The main functions of an intermediary are listed in subparagraph (e), namely receiving, transmitting or storing data messages on behalf of another person. Additional "value-added services" may be performed by network operators and other intermediaries, such as formatting, translating, recording, authenticating, certificating and preserving data messages and providing security services for electronic transactions. "Intermediary" under the Model Law is defined not as a generic category but with respect to each data message, thus recognizing that the same person

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[11/] A question to be discussed by the Commission is whether the definition of EDI necessarily implies that EDI messages are communicated electronically from computer to computer, or whether that definition, while primarily covering situations where data messages are communicated through a telecommunications system, would also cover exceptional or incidental types of situation where data structured in the form of an EDI message would be communicated by means that do not involve telecommunications systems, for example, the case where magnetic disks containing EDI messages would be delivered to the addressee by courier (see A/CN.9/407, para. 51).

could be the originator or addressee of one data message and an intermediary with respect to another data message. The Model Law, which is focused on the relationships between originators and addressees, does not, in general, deal with the rights and obligations of intermediaries.

"Information system"

52. The definition of "information system" is intended to cover the entire range of technical means used for transmitting, receiving and storing information. For example, depending on the factual situation, the notion of "information system" could be indicating a communications network, and in other instances could include an electronic mailbox or even a telecopier. The Model Law does not address the question of whether the information system is located on the premises of the addressee or on other premises, since location of information systems is not an operative criterion under the Model Law.

References:

A/CN.9/407, paras. 41-52;
A/CN.9/406, paras. 132-156;
A/CN.9/WG.IV/WP.62, article 2;
A/CN.9/390, paras. 44-65;
A/CN.9/WG.IV/WP.60, article 2;
A/CN.9/387, paras. 29-52;
A/CN.9/WG.IV/WP.57, article 1;
A/CN.9/373, paras. 11-20, 26-28 and 35-36;
A/CN.9/WG.IV/WP.55, paras. 23-26.
A/CN.9/360, paras. 29-31;
A/CN.9/WG.IV/WP.53, paras. 25-33.

Article 3. Interpretation

53. Article 3 is inspired by article 7 of the United Nations Convention on Contracts for the International Sale of Goods. It is intended to provide guidance for interpretation of the Model Law by courts and other national or local authorities. The expected effect of article 3 is to limit the extent to which a uniform text, once incorporated in local legislation, would be interpreted only by reference to the concepts of local law.

54. The purpose of paragraph (1) is to draw the attention of courts and other national authorities to the fact that the provisions of the Model Law (or the provisions of the instrument implementing the Model Law), while enacted as part of domestic legislation, and therefore domestic in character, should be interpreted with reference to its international origin in order to ensure uniformity in the interpretation of the Model Law in various countries.

55. As to the general principles on which the Model Law is based, the following non-exhaustive list may be considered: (1) to facilitate electronic commerce among and within nations; (2) to validate transactions entered into by means of new information technologies; (3) to promote and encourage the implementation of new information technologies; (4) to promote the uniformity of law; and (5) to support commercial practice.

References:

A/50/17, paras. 220-224;
A/CN.9/407, paras. 53-54;
A/CN.9/406, paras. 86-87;
A/CN.9/WG.IV/WP.62, article 3;
A/CN.9/390, paras. 66-73;
A/CN.9/WG.IV/WP.60, article 3;
A/CN.9/387, paras. 53-58;
A/CN.9/WG.IV/WP.57, article 3;
A/CN.9/373, paras. 38-42;
A/CN.9/WG.IV/WP.55, paras. 30-31;

CHAPTER II. APPLICATION OF LEGAL REQUIREMENTS TO DATA MESSAGES

Article 4. Legal recognition of data messages

56. Article 4 embodies the fundamental principle that data messages should not be discriminated against, i.e., that there should be no disparity of treatment between data messages and paper-based documents. It is intended to apply notwithstanding any statutory requirements for a "writing" or an original. That fundamental principle is intended to find general application and its scope should not be limited to evidence or other matters covered in chapter II. It should be noted, however, that such a principle is not intended to override any of the requirements contained in articles 5 to 9. By stating that "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 4 merely indicates that the form in which certain information is presented or retained cannot be used as the only reason for which that information would be denied legal effectiveness, validity or enforceability. However, article 4 should not be misinterpreted as establishing the legal validity of any given data message or of any information contained therein.

References:

A/50/17, paras. 225-227;
A/CN.9/407, para. 55;
A/CN.9/406, paras. 91-94;
A/CN.9/WG.IV/WP. 62, article 5 bis;
A/CN.9/390, paras. 79-87;
A/CN.9/WG.IV/WP. 60, article 5 bis;
A/CN.9/387, paras. 93-94.

Article 5. Writing

57. Article 5 is intended to define the basic standard to be met by a data message in order to be considered as meeting a requirement (which may result from statute, regulation or judge-made law) that information be retained or presented "in writing" (or that the information be contained in a "document" or other paper-based instrument). It may be noted that article 5 is part of a set of three articles (articles 5, 6 and 7), which share the same structure and should be read together.

58. In the preparation of the Model Law, particular attention was paid to the functions traditionally performed by various kinds of "writings" in a paper-based environment. For example, the following non-exhaustive list indicates reasons why national laws require the use of "writings": (1) to ensure that there would be tangible evidence of the existence and nature of the intent of the parties to bind themselves; (2) to help the parties be aware of the consequences of their entering into a contract; (3) to provide that a document would be legible by all; (4) to provide that a document would remain unaltered over time and provide a permanent record of a transaction; (5) to allow for the reproduction of a document so that each party would hold a copy of the same data; (6) to allow for the authentication of data by means of a signature; (7) to provide that a document would be in a form acceptable to public authorities and courts; (8) to finalize the intent of the author of the "writing" and provide a record of that intent; (9) to allow for the easy storage of data in a tangible form; (10) to facilitate control and subsequent audit for accounting, tax or regulatory purposes; and (11) to bring legal rights and obligations into existence in those cases where a "writing" was required for validity purposes.

59. However, in the preparation of the Model Law, it was found that it would be inappropriate to adopt an overly comprehensive notion of the functions performed by writing. Existing requirements that data be presented in written form often combine the requirement of a "writing" with concepts distinct from writing, such as signature and original. Thus, when adopting a functional approach,

attention should be given to the fact that the requirement of a "writing" should be considered as the lowest layer in a hierarchy of form requirements, which provide distinct levels of reliability, traceability and unalterability with respect to paper-based documents. The requirement that data be presented in written form (which can be described as a "threshold requirement") should thus not be confused with more stringent requirements such as "signed writing", "signed original" or "authenticated legal act". For example, under certain national laws, a written document that is neither dated nor signed, and the author of which either is not identified in the written document or is identified by a mere letterhead, would be regarded as a "writing" although it might be of little evidential weight in the absence of other evidence (e.g., testimony) regarding the authorship of the document. In addition, the notion of unalterability should not be considered as built into the concept of writing as an absolute requirement since a "writing" in pencil might still be considered a "writing" under certain existing legal definitions. Taking into account the way in which such issues as integrity of the data and protection against fraud are dealt with in a paper-based environment, a fraudulent document would nonetheless be regarded as a "writing". In general, notions such as "evidence" and "intent of the parties to bind themselves" are to be tied to the more general issues of reliability and authentication of the data and should not be included in the definition of a "writing".

60. The purpose of article 5 is not to establish a requirement that, in all instances, data messages should fulfil all conceivable functions of a writing. Rather than focusing upon specific functions of a "writing", for example, its evidentiary function in the context of tax law or its warning function in the context of civil law, article 5 focuses upon the basic notion of the information being reproduced and read. That notion is expressed in article 5 in terms that were found to provide an objective criterion, namely that the information in a data message must be accessible so as to be usable for subsequent reference. The use of the word "accessible" is meant to imply that information in the form of computer data should be readable and interpretable, and that the software that might be necessary to render such information readable should be retained. The word "usable" is not intended to cover only human use but also computer processing. As to the notion of "subsequent reference", it was preferred to such notions as "durability" or "non-alterability", which would have established too harsh standards, and to such notions as "readability" or "intelligibility", which might constitute too subjective criteria.

61. The principle embodied in paragraph (2) of articles 5 to 7 is that an enacting State may exclude from the application of those articles certain situations to be specified in the legislation enacting the Model Law. An enacting State may wish to exclude specifically certain types of situations, depending in particular on the purpose of the formal requirement in question. One such type of situation may be the case of writing requirements intended to provide notice or warning of specific factual or legal risks, for example, requirements for warnings to be placed on certain types of products. Other specific exclusion might be considered, for example in the context of formalities required pursuant to international treaty obligations of the enacting State (e.g., the requirement that a cheque be in writing pursuant to the Convention providing a Uniform Law for Cheques, Geneva, 1931) and other kinds of situations and areas of law that are beyond the power of the enacting State to change by means of a statute.

62. Paragraph (2) was included with a view to enhancing the acceptability of the Model Law. It recognizes that the matter of specifying exclusions should be left to enacting States, an approach that would take better account of differences in national circumstances. However, it should be noted that the objectives of the Model Law would not be achieved if paragraph (2) were used to establish blanket exceptions, and the opportunity provided by paragraph (2) in that respect should be avoided. Numerous exclusions from the scope of articles 5 to 7 would raise needless obstacles to the development of modern communication techniques, since what the Model Law contains are very fundamental principles and approaches that are expected to find general application.

References:

A/50/17, paras. 228-241;
A/CN.9/407, paras. 56-63;
A/CN.9/406, paras. 95-101;
A/CN.9/WG.IV/WP.62, article 6;
A/CN.9/390, paras. 88-96;
A/CN.9/WG.IV/WP.60, article 6;
A/CN.9/387, paras. 66-80;
A/CN.9/WG.IV/WP.57, article 6;
A/CN.9/WG.IV/WP.58, annex;
A/CN.9/373, paras. 45-62;
A/CN.9/WG.IV/WP.55, paras. 36-49;
A/CN.9/360, paras. 32-43;
A/CN.9/WG.IV/WP.53, paras. 37-45;
A/CN.9/350, paras. 68-78;
A/CN.9/333, paras. 20-28;
A/CN.9/265, paras. 59-72.

Article 6. Signature

63. Article 6 is based on the recognition of the functions of a signature in a paper-based environment. In the preparation of the Model Law, the following functions of a signature were considered: to identify a person; to provide certainty as to the personal involvement of that person in the act of signing; to associate that person with the content of a document. It was noted that, in addition, a signature could perform a variety of functions, depending on the nature of the document that was signed. For example, a signature might attest to the intent of a party to be bound by the content of a signed contract; the intent of a person to endorse authorship of a text; the intent of a person to associate itself with the content of a document written by someone else; the fact that, and the time when, a person had been at a given place.

64. It may be noted that, alongside the traditional handwritten signature, there exist various types of procedures (e.g., stamping, perforation), sometimes also referred to as "signatures", which provide various levels of certainty. For example, in some countries, there exists a general requirement that contracts for the sale of goods above a certain amount should be "signed" in order to be enforceable. However, the concept of a signature adopted in that context is such that a stamp, perforation or even a typewritten signature or a printed letterhead might be regarded as sufficient to fulfil the signature requirement. At the other end of the spectrum, there exist requirements that combine the traditional handwritten signature with additional security procedures such as the confirmation of the signature by witnesses.

65. It might be desirable to develop functional equivalents for the various types and levels of signature requirements in existence. Such an approach would increase the level of certainty as to the degree of legal recognition that could be expected from the use of the various means of authentication used in EDI practice as substitutes for "signatures". However, the notion of signature is intimately linked to the use of paper and there might exist no technical solutions for accommodating all existing types and uses of "signature" in a dematerialized environment. Furthermore, any attempt to develop rules on standards and procedures to be used as substitutes for specific instances of "signatures" might create the risk of tying the legal framework provided by the Model Law to a given state of technical development.

66. With a view to ensuring that a message that was required to be authenticated should not be denied legal value for the sole reason that it was not authenticated in a manner peculiar to paper documents, article 6 adopts a comprehensive approach. It establishes the general conditions under which data messages would be regarded as authenticated with sufficient credibility and would be enforceable in the face of signature requirements which currently present barriers to electronic commerce. Article 6 focuses on the two basic functions of a signature, namely to identify the author of a document and to confirm that the author approved the content of that document. Paragraph (1)(a) establishes the principle that, in an electronic environment, the basic legal functions of a signature are

performed by way of a method that identifies the originator of a data message and confirms that the originator approved the content of that data message.

67. Paragraph (1)(b) establishes a flexible approach to the level of security to be achieved by the method of identification used under paragraph (1)(a). The method used under paragraph (1)(a) should be as reliable as is appropriate for the purpose for which the data message is generated or communicated, in the light of all the circumstances, including any agreement between the originator and the addressee of the data message.

68. In determining whether the method used under paragraph (1)(a) is appropriate, legal, technical and commercial factors that may be taken into account include the following: (1) the sophistication of the equipment used by each of the parties; (2) the nature of their trade activity; (3) the frequency at which commercial transactions take place between the parties; (4) the kind and size of the transaction; (5) the function of signature requirements in a given statutory and regulatory environment; (6) the capability of communication systems; (7) compliance with authentication procedures set forth by intermediaries; (8) the range of authentication procedures made available by any intermediary; (9) compliance with trade customs and practice; (10) the existence of insurance coverage mechanisms against unauthorized messages; (11) the importance and the value of the information contained in the data message; (12) the availability of alternative methods of identification and the cost of implementation; (13) the degree of acceptance or non-acceptance of the method of identification in the relevant industry or field both at the time the method was agreed upon and the time when the data message was communicated; and (14) any other relevant factor.

69. Paragraph (1)(b) does not introduce a distinction between the situation in which EDI users are linked by a communication agreement and the situation in which parties had no prior contractual relationship regarding the use of EDI. Thus, article 6 may be regarded as establishing a minimum standard of authentication for EDI messages that might be exchanged in the absence of a prior contractual relationship and, at the same time, to provide guidance as to what might constitute an appropriate substitute for a signature if the parties used EDI communications in the context of a communication agreement. The Model Law is thus intended to provide useful guidance both in a context where national laws would leave the question of authentication of data messages entirely to the discretion of the parties and in a context where requirements for signature, which were usually set by mandatory provisions of national law, should not be made subject to alteration by agreement of the parties.

70. The notion of an "agreement between the originator and the addressee of a data message" is to be interpreted as covering not only bilateral or multilateral agreements concluded between parties exchanging directly data messages (e.g., "trading partners agreements", "communication agreements" or " interchange agreements") but also agreements involving intermediaries such as networks (e.g., "third-party service agreements"). Agreements concluded between EDI users and networks may incorporate "system rules", i.e., administrative and technical rules and procedures to be applied when communicating data messages. However, possible agreement between originators and addressees of data messages as to the use of a method of authentication is not conclusive evidence of whether that method is reliable or not.

71. It should be noted that, under the Model Law, the mere signing of a data message by means of a functional equivalent of a handwritten signature is not intended, in and of itself, to confer legal validity to the data message. Whether a data message that fulfilled the requirement of a signature has legal validity is to be settled under applicable law outside the Model Law.

References:

A/50/17, paras. 242-248;
A/CN.9/407, paras. 64-70;
A/CN.9/406, paras. 102-105;
A/CN.9/WG.IV/WP.62, article 7;
A/CN.9/390, paras. 97-109;
A/CN.9/WG.IV/WP.60, article 7;
A/CN.9/387, paras. 81-90;
A/CN.9/WG.IV/WP.57, article 7;
A/CN.9/WG.IV/WP.58, annex;
A/CN.9/373, paras. 63-76;
A/CN.9/WG.IV/WP.55, paras. 50-63;
A/CN.9/360, paras. 71-75;
A/CN.9/WG.IV/WP.53, paras. 61-66;
A/CN.9/350, paras. 86-89;
A/CN.9/333, paras. 50-59;
A/CN.9/265, paras. 49-58 and 79-80.

Article 7. Original

72. If "original" were defined as a medium on which information was fixed for the first time, it would be impossible to speak of "original" data messages, since the addressee of a data message would always receive a copy thereof. However, article 7 should be put in a different context. The notion of "original" in article 7 is useful since in practice many disputes relate to the question of originality of documents and in electronic commerce the requirement for presentation of originals constituted one of the main obstacles that the Model Law attempts to remove. Although in some jurisdictions the concepts of "writing", "original" and "signature" may overlap, the Model Law approaches them as three separate and distinct concepts. Article 7 is also useful in clarifying the notions of "writing" and "original", in particular in view of their importance for purposes of evidence.

73. Article 7 is pertinent to documents of title and negotiable instruments, in which the notion of uniqueness of an original is particularly relevant. However, attention is drawn to the fact that the Model Law is not intended only to apply to documents of title and negotiable instruments, or to such areas of law where special requirements exist with respect to registration or notarization of "writings", e.g., family matters or the sale of real estate. Examples of documents that might require an "original" are trade documents such as weight certificates, agricultural certificates, quality/quantity certificates, inspection reports, insurance certificates, etc. While such documents are not negotiable or used to transfer rights or title, it is essential that they be transmitted unchanged, that is in their "original" form, so that other parties in international commerce may have confidence in their contents. Using paper, these types of document are usually only accepted if they are "original" to lessen the chance that they have been altered, which would be difficult to detect in copies. Various technical means are available to certify the contents of a data message to confirm its "originality". Without this functional equivalent of originality, the sale of goods using EDI would be hampered by requiring the issuers of such documents to retransmit their data message each and every time the goods are sold, or forcing the parties to use paper documents to supplement the EDI transaction.

74. Article 7 should be regarded as stating the minimum acceptable form requirement to be met by a data message for it to be regarded as the functional equivalent of an original. The provisions of article 7 should be regarded as mandatory, to the same extent that existing provisions regarding the use of paper-based original documents would be regarded as mandatory.

75. Article 7 emphasizes the importance of the integrity of the information for its originality and sets out criteria to be taken into account when assessing integrity by reference to systematic recording of the information, assurance that the information was recorded without lacunae and protection of the data against alteration. It links the concept of originality to a method of authentication and puts the focus on the method of authentication to be followed in order to meet the requirement. It is based on the following elements: a simple criterion as to "integrity" of the data; a description of the elements to be

taken into account in assessing the integrity; and an element of flexibility, i.e., a reference to circumstances.

76. As regards the words "the time when it was first composed in its final form" in paragraph (1)(b), it should be noted that the provision is intended to encompass the situation where information was first composed as a paper document and subsequently transferred on to a computer. In such a situation, paragraph (1)(b) is to be interpreted as requiring assurances that the information has remained complete and unaltered from the time when it was composed as a paper document onwards, and not only as from the time when it was translated into electronic form. However, where several drafts were created and stored before the final message was composed, paragraph (1)(b) should not be misinterpreted as requiring assurance as to the integrity of the drafts.

77. Paragraph (2)(a) sets forth the criteria for assessing integrity, taking care to except necessary additions to the first (or "original") data message such as endorsements, certifications, notarizations, etc. from other alterations. As long as the contents of a data message remain complete and unaltered, necessary additions to that data message would not affect its "originality". Thus when an electronic certificate is added to the end of an "original" data message to attest to the "originality" of that data message, or when data is automatically added by computer systems at the start and the finish of a data message in order to transmit it, such additions would be considered as if they were a supplemental piece of paper with an "original" piece of paper, or the envelope and stamp used to send that "original" piece of paper.

78. As in other articles of chapter II, the words "a rule of law" in the opening phrase of article 7 are to be understood as encompassing not only statutory or regulatory law but also judicially-created law and other procedural law. In certain common law countries, where the words "a rule of law" would normally be interpreted as referring to common law rules, as opposed to statutory requirements, it should be noted that, in the context of the Model Law, the words "a rule of law" are intended to encompass those various sources of law.

79. Paragraph (3), as was the case with similar provisions in articles 5 and 6, was included with a view to enhancing the acceptability of the Model Law. It recognizes that the matter of specifying exclusions should be left to enacting States, an approach that would take better account of differences in national circumstances. However, it should be noted that the objectives of the Model Law would not be achieved if paragraph (3) were used to establish blanket exceptions. Numerous exclusions from the scope of articles 5 to 7 would raise needless obstacles to the development of modern communication techniques, since what the Model Law contains are very fundamental principles and approaches that are expected to find general application.

References:

A/50/17, paras. 249-255;
A/CN.9/407, paras. 71-79;
A/CN.9/406, paras. 106-110;
A/CN.9/WG.IV/WP.62, article 8;
A/CN.9/390, paras. 110-133;
A/CN.9/WG.IV/WP.60, article 8;
A/CN.9/387, paras. 91-97;
A/CN.9/WG.IV/WP.57, article 8;
A/CN.9/WG.IV/WP.58, annex;
A/CN.9/373, paras. 77-96;
A/CN.9/WG.IV/WP.55, paras. 64-70;
A/CN.9/360, paras. 60-70;
A/CN.9/WG.IV/WP.53, paras. 56-60;
A/CN.9/350, paras. 84-85;
A/CN.9/265, paras. 43-48.

Article 8. Admissibility and evidential weight of data messages

80. The purpose of article 8 is to establish both the admissibility of data messages as evidence in legal proceedings and their evidential value. With respect to admissibility, paragraph (1), establishing that data messages should not be denied admissibility as evidence in legal proceedings on the sole ground that they are in electronic form, puts emphasis on the general principle stated in article 4 and is needed to make it expressly applicable to admissibility of evidence, an area in which particularly complex issues might arise in certain jurisdictions. The term "best evidence" is a term understood in and necessary for certain common law jurisdictions. However, the notion of "best evidence" could raise a great deal of uncertainty in legal systems in which such a rule is unknown. States in which the term would be regarded as meaningless and potentially misleading may wish to enact the Model Law without the reference to the "best evidence" rule contained in paragraph (1).

81. As regards the assessment of the evidential weight of a data message, paragraph (2) provides useful guidance as to how the evidential value of data messages should be assessed (e.g., depending on whether they were generated, stored or communicated in a reliable manner).

References:

A/50/17, paras. 256-263;
A/CN.9/407, paras. 80-81;
A/CN.9/406, paras. 111-113;
A/CN.9/WG.IV/WP.62, article 9;
A/CN.9/390, paras. 134-143;
A/CN.9/WG.IV/WP.60, article 9;
A/CN.9/387, paras. 98-109;
A/CN.9/WG.IV/WP.57, article 9;
A/CN.9/WG.IV/WP.58, annex;
A/CN.9/373, paras. 97-108;
A/CN.9/WG.IV/WP.55, paras. 71-81;
A/CN.9/360, paras. 44-59;
A/CN.9/WG.IV/WP.53, paras. 46-55;
A/CN.9/350, paras. 79-83 and 90-91;
A/CN.9/333, paras. 29-41;
A/CN.9/265, paras. 27-48.

Article 9. Retention of data messages

82. Article 9 establishes a set of alternative rules for existing requirements regarding the storage of information (e.g., for accounting or tax purposes) that may constitute obstacles to the development of modern trade.

83. Paragraph (1) is intended to set out the conditions under which the obligation to store data messages that might exist under the applicable law would be met. Subparagraph (a) reproduces the conditions established under article 5 for a data message to satisfy a rule which prescribes the presentation of a "writing". Subparagraph (b) emphasizes that the message does not need to be retained unaltered as long as the information stored accurately reflects the data message as it was sent. It would not be appropriate to require that information should be stored unaltered, since usually messages are decoded, compressed or converted in order to be stored.

84. Subparagraph (c) is intended to cover all the information that may need to be stored, which includes, apart from the message itself, certain transmittal information that may be necessary for the identification of the message. Subparagraph (c), by imposing the retention of the transmittal information associated with the data message, is creating a standard that is higher than most standards existing under national laws as to the storage of paper-based communications. However, it should not be understood as imposing an obligation to retain transmittal information additional to the information contained in the data message when it was generated, stored or transmitted, or information contained in a separate data message, such as an acknowledgement of receipt. Moreover, while some transmittal

information is important and has to be stored, other transmittal information can be exempted without the integrity of the data message being compromised. That is the reason why subparagraph (c) establishes a distinction between those elements of transmittal information that are important for the identification of the message and the very few elements of transmittal information covered in paragraph (2) (e.g., communication protocols), which are of no value with regard to the data message and which, typically, would automatically be stripped out of an incoming EDI message by the receiving computer before the data message actually entered the information system of the addressee.

85. In practice, storage of information, and especially storage of transmittal information, may often be carried out by someone other than the originator or the addressee, such as an intermediary. Nevertheless, it is intended that the person obligated to retain certain transmittal information cannot escape meeting that obligation simply because, for example, the communications system operated by that other person does not retain the required information. This is intended to discourage bad practice or wilful misconduct. Paragraph (3) provides that in meeting its obligations under paragraph (1), an addressee or originator may use the services of any third party, not just an intermediary.

References:

A/50/17, paras. 264-270;
A/CN.9/407, paras. 82-84;
A/CN.9/406, paras. 59-72;
A/CN.9/WG.IV/WP.60, article 14;
A/CN.9/387, paras. 164-168;
A/CN.9/WG.IV/WP.57, article 14;
A/CN.9/373, paras. 123-125;
A/CN.9/WG.IV/WP.55, para. 94.

CHAPTER III. COMMUNICATION OF DATA MESSAGES

Article 10. Variation by agreement

86. The decision to undertake the preparation of the Model Law was based on the recognition that, in practice, solutions to the legal difficulties raised by the use of modern means of communication are mostly sought within contracts. The Model Law is thus intended to support the principle of party autonomy. However, that principle is embodied only with respect to the provisions of the Model Law contained in chapter III. The reason for such a limitation is that the provisions contained in chapter II may, to some extent, be regarded as a collection of exceptions to well-established rules regarding the form of legal transactions. Such well-established rules are normally of a mandatory nature since they generally reflect decisions of public policy. An unqualified statement regarding the freedom of parties to derogate from the Model Law might thus be misinterpreted as allowing parties, through a derogation to the Model Law, to derogate from mandatory rules adopted for reasons of public policy. The provisions contained in chapter II should be regarded as stating the minimum acceptable form requirement and are, for that reason, to be regarded as mandatory, unless expressly stated otherwise.

87. Article 10 is intended to apply not only in the context of relationships between originators and addressees of data messages but also in the context of relationships involving intermediaries. Thus, the provisions of chapter II could be varied either by bilateral or multilateral agreements between the parties, or by system rules agreed to by the parties. However, the text expressly limits party autonomy to rights and obligations arising as between parties so as not to suggest any implication as to the rights and obligations of third parties.

References:

A/50/17, paras. 271-274;
A/CN.9/407, para. 85;
A/CN.9/406, paras. 88-89;
A/CN.9/WG.IV/WP.62, article 5;
A/CN.9/390, paras. 74-78;
A/CN.9/WG.IV/WP.60, article 5;
A/CN.9/387, paras. 62-65;
A/CN.9/WG.IV/WP.57, article 5;
A/CN.9/373, para. 37;
A/CN.9/WG.IV/WP.55, paras. 27-29.

Article 11. Attribution of data messages

88. Article 11 has its origin in article 5 of the UNCITRAL Model Law on International Credit Transfers, which defines the obligations of the sender of a payment order. Article 11 is intended to apply where there is a question as to whether a data message was really sent by the person who is indicated as being the originator. In the case of a paper-based communication the problem would arise as the result of an alleged forged signature of the purported originator. In an electronic environment, an unauthorized person may have sent the message but the authentication by code, encryption or the like would be accurate. The purpose of article 11 is not to assign responsibility. It deals rather with attribution of data messages by establishing a presumption that under certain circumstances a data message would be considered as a message of the originator, and goes on to qualify that presumption in case the addressee knew or ought to have known that the data message was not that of the originator.

89. Paragraph (1) recalls the principle that an originator is bound by a data message if it has effectively sent that message. Paragraph (2) refers to the situation where the message was sent by a person other than the originator who had the authority to act on behalf of the originator. Paragraph (2) is not intended to displace the domestic law of agency, and the question as to whether the other person did in fact and in law have the authority to act on behalf of the originator is left to the appropriate legal rules outside the Model Law.

90. Paragraph (3) deals with three kinds of situations, in which the addressee could rely on a data message as being that of the originator: firstly, situations in which the addressee properly applied an authentication procedure previously agreed by the originator; secondly, situations in which the addressee properly applied a procedure which was reasonable in the circumstances; and thirdly, situations in which the data message resulted from the actions of a person who, by virtue of its relationship with the originator, had access to the originator's authentication procedures. By stating that the addressee "is entitled to regard a data as being that of the originator", paragraph (3) read in conjunction with paragraph (4)(a) is intended to indicate that the addressee could act on the assumption that the data message is that of the originator up to the point in time it received notice from the originator that the data message was not that of the originator, or up to the point in time when it knew or should have known that the data message was not that of the originator.

91. Under paragraph (3)(a)(i), if the addressee applies any authentication procedures previously agreed by the originator and such application results in the proper verification of the originator as the source of the message, the message is presumed to be that of the originator. That covers not only the situation where an authentication procedure has 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. Paragraph (3)(a)(ii) establishes that a purported originator may be bound by a data message even though the purported originator might never have sent that message (for example in a case of fraud) provided that the addressee applied a procedure that was "reasonable under the circumstances". However, the risk placed on the purported originator is balanced by the heavy

burden of proof placed on the addressee, who would have to prove what was "reasonable in the circumstances".

92. The effect of paragraph (3)(b), read in conjunction with paragraph (4)(b), is that the originator or the addressee, as the case may be, would be responsible for any unauthorized data message that could be shown to have been sent as a result of negligence of that party.

93. Paragraph (4)(a) should not be misinterpreted as relieving the originator from the consequences of sending a data message, with retroactive effect, irrespective of whether the addressee had acted on the assumption that the data message was that of the originator. Paragraph (4) is not intended to provide that receipt of a notice under subparagraph (a) would nullify the original message retroactively. Under subparagraph (a), the originator is released from the binding effect of the message after the time notice is received and not before that time. Moreover, paragraph (4) should not be read as allowing the originator to avoid being bound by the data message by sending notice to the addressee under subparagraph (a), in a case where the message had, in fact, been sent by the originator and the addressee properly applied agreed or reasonable authentication procedures. If the addressee can prove that the message is that of the originator, paragraph (1) would apply and not paragraph (4)(a). As to the meaning of "notice within a reasonable time", the notice should be such as to give the addressee sufficient time to react, for example in the case of just-in-time supply where the addressee should be given time to adjust its production chain.

94. With respect to paragraph (4)(b), it should be noted that the Model Law could lead to the result that the addressee would be entitled to rely on a data message if it had properly applied the agreed authentication procedures, even if it knew that the data message was not that of the originator. It was generally felt when preparing the Model Law that the risk that such a situation could arise should be accepted, with a view to preserving the reliability of authentication procedures.

95. Paragraph (5) is 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. In addition, paragraph (5) is intended to deal with errors in the content of the message arising from errors in transmission.

96. Paragraph (6) deals with the issue of erroneous duplication of data messages, an issue of considerable practical importance. It establishes the standard of care to be applied by the addressee to distinguish an erroneous duplicate of a data message from a separate data message. [Remark on pagraph (6): the Commission, at its twenty-eighth session, failed to achieve consensus on the substance of paragraph (6), which is to be discussed further at the twenty-ninth session.]

97. Early drafts of article 11 contained an additional paragraph, expressing the principle that the attribution of authorship of a data message to the originator should not interfere with the legal consequences of that message, which should be determined by other applicable rules of national law. It was later felt that it was not necessary to express that principle in the Model Law but that it should be mentioned in this Guide.

References:

A/50/17, paras. 275-303;
A/CN.9/407, paras. 86-89;
A/CN.9/406, paras. 114-131;
A/CN.9/WG.IV/WP.62, article 10;
A/CN.9/390, paras. 144-153;
A/CN.9/WG.IV/WP.60, article 10;
A/CN.9/387, paras. 110-132;
A/CN.9/WG.IV/WP.57, article 10;
A/CN.9/373, paras. 109-115;
A/CN.9/WG.IV/WP.55, paras. 82-86.

Article 12. Acknowledgement of receipt

98. The use of functional acknowledgements is a business decision to be made by EDI users; the Model Law does not intend to impose the use of any such procedure. However, taking into account the commercial value of a system of acknowledgement of receipt and the widespread use of such systems in the context of EDI, it was felt that the Model Law should address a number of legal issues arising from the use of acknowledgement procedures. It should be noted that the notion of "acknowledgement" is sometimes used to cover a variety of procedures, ranging from a mere acknowledgement of receipt of an unspecified message to an expression of agreement with the content of a specific data message. In many instances, the procedure of "acknowledgement" would parallel the system known as "return receipt requested" in postal systems. Acknowledgements of receipt may be required in a variety of instruments, e.g., in the data message itself, in bilateral or multilateral communication agreements, or in "system rules". It should be borne in mind that variety among acknowledgement procedures implies variety of the related costs. The provisions of article 12 are based on the assumption that acknowledgement procedures are to be used at the discretion of the originator. Article 12 is not intended to deal with the legal consequences that may flow from sending an acknowledgement of receipt, apart from establishing receipt of the data message. For example, where an originator sends an offer in a data message and requests acknowledgement of receipt, the acknowledgement of receipt simply evidences that the offer has been received. Whether or not sending that acknowledgement amounted to accepting the offer is not dealt with by the Model Law but by contract law outside the Model Law.

99. The purpose of paragraph (2) is to validate acknowledgement by any communication or conduct of the addressee (e.g., the shipment of the goods as an acknowledgement of receipt of a purchase order) where the originator has not requested that the acknowledgement be in a particular form. Paragraph (3), which deals with the situation where the originator has stated that the data message is conditional on receipt of an acknowledgement, applies whether or not the originator has specified that the acknowledgement should be received by a certain time.

100. The purpose of paragraph (4) is to deal with the more common situation where an acknowledgement is requested, without any statement being made by the originator that the data message is of no effect until an acknowledgement has been received. Such a provision is needed to establish the point in time when the originator of a data message who has requested an acknowledgement of receipt is relieved from any legal implication of sending that data message if the requested acknowledgement has not been received. An example of a factual situation where a provision along the lines of paragraph (4) would be particularly useful would be that the originator of an offer to contract who has not received the requested acknowledgement from the addressee of the offer may need to know the point in time after which it is free to transfer the offer to another party. It may be noted that the provision does not create any obligation binding on the originator, but merely establishes means by which the originator, if it so wishes, can clarify its status in cases where it has not received the requested acknowledgement. It may also be noted that the provision does not create any obligation binding on the addressee of the data message, who would, in most circumstances, be free to rely or not to rely on any given data message, provided that it would bear the risk of the data message being

unreliable for lack of an acknowledgement of receipt. The addressee, however, is protected since the originator who does not receive a requested acknowledgement may not automatically treat the data message as though it had never been transmitted, without giving further notice to the addressee. The procedure described under paragraph (4) is purely at the discretion of the originator. For example, where the originator sent a data message which under the agreement between the parties had to be received by a certain time, and the originator requested an acknowledgement of receipt, the addressee could not deny the legal effectiveness of the message simply by withholding the requested acknowledgement.

101. The rebuttable presumption established in paragraph (5) is 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. Paragraph (5) corresponds to a certain type of acknowledgement, for example, an EDIFACT message establishing that the data message received is syntactically correct, i.e., that it can be processed by the receiving computer. The reference to technical requirements, which is to be construed primarily as a reference to "data syntax" in the context of EDI communications, may be less relevant in the context of the use of other means of communication, such as telegram or telex.

References:

A/CN.9/407, paras. 90-92;
A/CN.9/406, paras. 15-33;
A/CN.9/WG.IV/WP.60, article 11;
A/CN.9/387, paras. 133-144;
A/CN.9/WG.IV/WP.57, article 11;
A/CN.9/373, paras. 116-122;
A/CN.9/WG.IV/WP.55, paras. 87-93;
A/CN.9/360, para. 125;
A/CN.9/WG.IV/WP.53, paras. 80-81;
A/CN.9/350, para. 92;
A/CN.9/333, paras. 48-49.

Article 13. Formation and validity of contracts

102. Article 13 is not intended to interfere with 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. It deals not only with the issue of contract formation but also with the form in which an offer and an acceptance may be expressed. In certain countries, a provision along the lines of paragraph (1) might be regarded as merely stating the obvious, namely that an offer and an acceptance, as any other expression of will, can be communicated by any means, including data messages. However, the provision is needed in view of the remaining uncertainties in a number of countries as to whether contracts can validly be concluded by electronic means. The need for such a provision results from the doubt that may exist in many countries as to the validity of contracts concluded through the use of computer because the data messages expressing offer and acceptance may be generated by computers without immediate human intervention, thus raising doubts as to the expression of intent by the parties. Another reason for such uncertainty is inherent in the mode of communication and results from the absence of a paper document.

103. It may also be noted that paragraph (1) reinforces, in the context of contract formation, a principle already embodied in other articles of the Model Law, such as articles 4, 8 and 11, all of which establish the legal effectiveness of data messages. However, paragraph (1) is needed since the fact that electronic messages may have legal value as evidence and produce a number of effects, including those provided in articles 8 and 11, does not necessarily mean that they can be used for the purpose of concluding valid contracts.

104. Paragraph (1) covers not merely the cases in which both the offer and the acceptance are communicated by electronic means but also cases in which only the offer or only the acceptance is communicated electronically. As to the time and place of formation of contracts in cases where an offer or the acceptance of an offer is expressed by means of a data message, no specific rule has been included in the Model Law in order not to interfere with national law applicable to contract formation. It was felt that such a provision might exceed the aim of the Model Law, which should be limited to providing that electronic communications would achieve the same degree of legal certainty as paper-based communications. The combination of existing rules on the formation of contracts with the provisions contained in article 14 is designed to dispel uncertainty as to the time and place of formation of contracts in cases where the offer or the acceptance are exchanged electronically.

105. During the preparation of paragraph (1), it was felt that the provision 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 include 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. For that reason, paragraph (2) provides that an enacting State can exclude the application of paragraph (1) in certain instances to be specified in the legislation enacting the Model Law.

References:

A/CN.9/407, para. 93;
A/CN.9/406, paras. 34-41;
A/CN.9/WG.IV/WP.60, article 12;
A/CN.9/387, paras. 145-151;
A/CN.9/WG.IV/WP.57, article 12;
A/CN.9/373, paras. 126-133;
A/CN.9/WG.IV/WP.55, paras. 95-102;
A/CN.9/360, paras. 76-86;
A/CN.9/WG.IV/WP.53, paras. 67-73;
A/CN.9/350, paras. 93-96;
A/CN.9/333, paras. 60-68.

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

106. Article 14 results from the recognition that, for the operation of many existing rules of law, it is important to ascertain the time and place of receipt of information. The use of electronic communication techniques makes those difficult to ascertain. It is not uncommon for users of EDI and related means of communication to communicate from one State to another without knowing the location of information systems through which communication is operated. In addition, the location of certain communication systems may change without either of the parties being aware of the change. The Model Law is thus intended to reflect the fact that the location of information systems is irrelevant and sets forth a more objective criterion, namely, the place of business of the parties. In that connection, it should be noted that article 14 is not intended to establish a conflict-of-laws rule.

107. Paragraph (1) defines the time of dispatch of a data message as the time when the data message enters an information system outside the control of the originator, which may be the information system of an intermediary or an information system of the addressee. The concept of "dispatch" refers to the commencement of the electronic transmission of the data message. Where "dispatch" already has an established meaning, it should be noted that article 14 is intended to supplement national rules on dispatch and not to displace them. If dispatch occurs when the data message reaches an information system of the addressee, dispatch under paragraph (1) and receipt under paragraph (2) are simultaneous, except where the data message is sent to an information system of the addressee that is not the information system designated by the addressee under paragraph (2)(a).

108. Paragraph (2), the purpose of which is to define the time of receipt of a data message, addresses the situation where the addressee unilaterally designates a specific information system for the receipt of a message (in which case the designated system may or may not be an information system of the addressee), and the data message reaches an information system of the addressee that is not the designated system. In such a situation, receipt is deemed to occur when the data message is retrieved by the addressee. By "designated information system", the Model Law is intended to cover a system that has been specifically designated by a party, for instance in the case where an offer expressly specifies the address to which acceptance should be sent. The mere indication of an electronic mail or telecopy address on a letterhead or other document should not be regarded as express designation of one or more information systems.

109. Attention is drawn to the notion of "entry" into an information system, which is used for both the definition of dispatch and that of receipt of a data message. A data message enters an information system at the time when it becomes available for processing within that information system. Whether a data message which enters an information system is intelligible or usable by the addressee is outside the purview of the Model Law. The Model Law does not intend to overrule provisions of national law under which receipt of a message may occur at the time when the message enters the sphere of the addressee, irrespective of whether the message is intelligible or usable by the addressee. Nor is the Model Law intended to run counter to trade usages, under which certain encoded messages are deemed to be received even before they are usable by, or intelligible for, the addressee. It was felt that the Model Law should not create a more stringent requirement than currently exists in a paper-based environment, where a message can be considered to be received even if it is not intelligible for the addressee or not intended to be intelligible to the addressee (e.g., where encrypted data is transmitted to a depository for the sole purpose of retention in the context of intellectual property rights protection).

110. A data message should not be considered to be dispatched if it merely reached the information system of the addressee but failed to enter it. It may be noted that the Model Law does not expressly address the question of possible malfunctioning of information systems as a basis for liability. In particular, where the information system of the addressee does not function at all or functions improperly or, while functioning properly, cannot be entered into by the data message (e.g., in the case of a telecopier that is constantly occupied), dispatch under the Model Law does not occur. It was felt during the preparation of the Model Law that the addressee should not be placed under the burdensome obligation to maintain its information system functioning at all times by way of a general provision.

111. The purpose of paragraph (4) is to deal with the place of receipt of a data message. The principal reason for including a rule on the place of receipt of a data message is to address a circumstance characteristic of electronic commerce that might not be treated adequately under existing law, namely, that very often the information system of the addressee where the data message is received, or from which the data message is retrieved, is located in a jurisdiction other than that in which the addressee itself is located. Thus, the rationale behind the provision is to ensure that the location of an information system is not the determinant element, and that there is some reasonable connection between the addressee and what is deemed to be the place of receipt, and that that place can be readily ascertained by the originator. It may be noted that the Model Law does 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.

112. It may be noted that paragraph (4), which contains a reference to the "underlying transaction", is intended to refer to both actual and contemplated underlying transactions. References to "place of business", "principal place of business" and "place of habitual residence" were adopted to bring the text in line with article 10 of the United Nations Convention on Contracts for the International Sale of Goods.

113. The effect of paragraph (4) is to introduce a distinction between the deemed place of receipt and the place actually reached by a data message at the time of its receipt under paragraph (2). That distinction is not to be interpreted as apportioning risks between the originator and the addressee in case of damage or loss of a data message between the time of its receipt under paragraph (2) and the time when it reached its place of receipt under paragraph (4). Paragraph (4) merely establishes an irrebuttable presumption regarding a legal fact, to be used where another body of law (e.g., on formation of contracts or conflict of laws) require determination of the place of receipt of a data message. However, it was felt during the preparation of the Model Law that introducing a deemed place of receipt, as distinct from the place actually reached by that data message at the time of its receipt, would be inappropriate outside the context of computerized transmissions (e.g., in the context of telegram or telex). The provision was thus limited in scope to cover only computerized transmissions of data messages. A further limitation is contained in paragraph (5), which excludes matters of administrative, criminal and data-protection law from the scope of paragraph (4). However, it should be noted that paragraph (5) only indicates that article 14, by its own force, does not apply to those matters. The use of the Model Law by an enacting State for determining the place of receipt or dispatch under administrative, criminal or data-protection law is not intended to be precluded.

References:

A/CN.9/407, paras. 94-99;
A/CN.9/406, paras. 42-58;
A/CN.9/WG.IV/WP.60, article 13;
A/CN.9/387, paras. 152-163;
A/CN.9/WG.IV/WP.57, article 13;
A/CN.9/373, paras. 134-146;
A/CN.9/WG.IV/WP.55, paras. 103-108;
A/CN.9/360, paras. 87-89;
A/CN.9/WG.IV/WP.53, paras. 74-76;
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