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## **Legal aspects of electronic commerce**

### **Explanatory note on the Convention on the Use of Electronic Communications in International Contracts**

#### **Note by the Secretariat**

##### **Addendum**

1. The Commission approved the final draft of the United Nations Convention on the Use of Electronic Communications in International Contracts (“the Convention”) at its thirty-eighth session (Vienna, 4-15 July 2005). The Convention was subsequently adopted by the General Assembly and opened for signature on ... .
2. When it approved the final draft for adoption by the General Assembly, at its thirty-eighth session, the Commission requested the Secretariat to prepare explanatory notes on the Convention and present them to the Commission at its thirty-ninth session (see A/60/17, para. 165).
3. Annex I to this note contains article-by-article remarks on the Convention. The Commission may wish to take note of the explanatory notes and request their publication by the Secretariat, together with the final text of the Convention.



## IV. Article-by-article remarks (*continued*)

### CHAPTER III. USE OF ELECTRONIC COMMUNICATIONS IN INTERNATIONAL CONTRACTS

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#### *Article 11. Invitations to make offers*

**A proposal to conclude a contract made through one or more electronic communications which is not addressed to one or more specific parties, but is generally accessible to parties making use of information systems, including proposals that make use of interactive applications for the placement of orders through such information systems, is to be considered as an invitation to make offers, unless it clearly indicates the intention of the party making the proposal to be bound in case of acceptance.**

#### **1. Purpose of the article**

1. This article is based on article 14, paragraph 1, of the United Nations Sales Convention. Its purpose is to clarify an issue that has raised considerable debate since the advent of the Internet, namely the extent to which parties offering goods or services through open, generally accessible communication systems, such as an Internet website, are bound by advertisements made in this way (A/CN.9/509, para. 75).

2. In a paper-based environment, advertisements in newspapers, radio and television, catalogues, brochures, price lists or other means not addressed to one or more specific persons, but generally accessible to the public, are regarded as invitations to submit offers (according to some legal writers, even in those cases where they are directed to a specific group of customers), since in such cases the intention to be bound is considered to be lacking. By the same token, the mere display of goods in shop windows and on self-service shelves is usually regarded as an invitation to submit offers. This understanding is consistent with article 14, paragraph 2, of the United Nations Sales Convention, which provides that a proposal other than a proposal addressed to one or more specific persons is to be considered as merely an invitation to make offers, unless the contrary is clearly indicated by the person making the proposal (A/CN.9/509, para. 76).

3. In keeping with the principle of media neutrality, UNCITRAL took the view that the solution for online transactions should not be different from the solution used for equivalent situations in a paper-based environment. UNCITRAL therefore agreed that, as a general rule, a company that advertises goods or services on the Internet or through other open networks should be considered as merely inviting those who accessed the site to make offers. Thus, an offer of goods or services through the Internet does not *prima facie* constitute a binding offer (A/CN.9/509, para. 77).

#### **2. Rationale for the rule**

4. If the United Nations Sales Convention's notion of "offer" is transposed to an electronic environment, a company that advertises its goods or services on the

Internet or through other open networks should be considered to be merely inviting those who access the site to make offers. Thus, an offer of goods or services through the Internet would not prima facie constitute a binding offer.

5. The difficulty that may arise in this context is how to strike a balance between a trader's possible intention (or lack thereof) of being bound by an offer, on the one hand, and the protection of relying parties acting in good faith, on the other. The Internet makes it possible to address specific information to a virtually unlimited number of persons and current technology permits contracts to be concluded nearly instantaneously, or at least creates the impression that a contract has been so concluded.

6. In legal literature, it has been suggested that that the "invitation to treat" model might not be appropriate for uncritical transposition to an Internet environment (see A/CN.9/WG.IV/WP.104/Add.1, paras. 4-7). One possible criterion for distinguishing between a binding offer and an invitation to treat may be based on the nature of the applications used by the parties. Legal writings on electronic contracting have proposed a distinction between websites offering goods or services through interactive applications and those that use non-interactive applications. If a website only offers information about a company and its products and any contact with potential customers lies outside the electronic medium, there would be little difference from a conventional advertisement. However, an Internet website that uses interactive applications may enable negotiation and immediate conclusion of a contract (in the case of virtual goods even immediate performance). Legal writings on electronic commerce have proposed that such interactive applications might be regarded as an offer "open for acceptance while stocks last", as opposed to an "invitation to treat". This proposition is at least at first sight consistent with legal thinking for traditional transactions. Indeed, the notion of offers to the public that are binding upon the offeror "while stocks last" is recognized also for international sales transactions.

7. In support of this approach, it has been argued that parties acting upon offers of goods or services made through the use of interactive applications might be led to assume that offers made through such systems were firm offers and that by placing an order they might be validly concluding a binding contract at that point in time. Those parties, it has been said, should be able to rely on such a reasonable assumption in view of the potentially significant economic consequences of contract frustration, in particular in connection with purchase orders for commodities or other items with highly fluctuating prices. Attaching consequence to the use of interactive applications, it was further said, might help enhance transparency in trading practices by encouraging business entities to state clearly whether or not they accepted to be bound by acceptance of offers of goods or services or whether they were only extending invitations to make offers (A/CN.9/509, para. 81).

8. UNCITRAL considered these arguments carefully. The final consensus was that the potentially unlimited reach of the Internet call for caution in establishing the legal value of these "offers". It was found that attaching a presumption of binding intention to the use of interactive applications would be detrimental for sellers holding a limited stock of certain goods, if the seller were to be liable to fulfil all purchase orders received from a potentially unlimited number of buyers (A/CN.9/546, para. 107). In order to avert that risk, companies offering goods or services through a website that use interactive applications enabling negotiation and

immediate processing of purchase orders for goods or services frequently indicate in their websites that they are not bound by those offers. UNCITRAL felt that, if this was already the case in practice, the Convention should not reverse it (A/CN.9/509, para. 82; A/CN.9/528, para. 116).

### **3. Notion of interactive applications and intention to be bound in case of acceptance**

9. The general principle that offers of goods or services that are accessible to an unlimited number of persons are not binding applies even when the offer is supported by an interactive application. Typically an “interactive application” is a combination of software and hardware for conveying offers of goods and services in a manner that allows for the parties to exchange information in a structured form with a view to concluding a contract automatically. The expression “interactive applications” focuses on what is apparent to the person accessing the system, namely that it is prompted to exchange information through that information system by means of immediate actions and responses having an appearance of automaticity (A/60/17, para. 87). It is irrelevant how the system functions internally and to what extent it is really automated (e.g. whether other actions, by human intervention or through the use of other equipment, might be required in order to effectively conclude a contract or process an order) (A/CN.9/546, para. 114).

10. UNCITRAL recognizes that in some situations it may be appropriate to regard a proposal to conclude a contract that is supported by interactive applications as evidencing the party’s intent to be bound in case of acceptance. Some business models are indeed based on the rule that offers through interactive applications are binding offers. In those cases, possible concerns about the limited availability of the relevant product or service are often addressed by including disclaimers stating that the offers were for a limited quantity only and by the automatic placement of orders according to the time they were received (A/CN.9/546, para. 112). UNCITRAL also noted that some case law seems to support the view that offers made by so-called “click-wrap” agreements and in Internet auctions may be interpreted as binding (A/CN.9/546, para. 109, see also A/CN.9/WG.IV/WP.104/Add.1, paras. 11-17). However, the extent to which this intent indeed exists is a matter to be assessed in the light of all the circumstances (for example, disclaimers made by the vendor or the general terms and conditions of the auction platform). As a general rule, UNCITRAL considered that it would be unwise to presume that persons using interactive applications to make offers always intended to make binding offers, because this presumption would not reflect the prevailing practice in the marketplace (A/CN.9/546, para. 112).

11. It should be noted that a proposal to conclude a contract only constitutes an offer if a number of conditions are fulfilled. For a sales contract governed by the United Nations Sales Convention, for example, the proposal must be sufficiently definite by indicating the goods and expressly or implicitly fixing or making provision for determining the quantity and the price.<sup>1</sup> Article 11 is not intended to create special rules for contract formation in electronic commerce. Accordingly, a party’s intention to be bound would not suffice to constitute an offer in the absence of those other elements (A/CN.9/546, para. 111).

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<sup>1</sup> United Nations Sales Convention, article 14, paragraph 1.

*References to preparatory work:*

UNCITRAL, 38th session (Vienna, 4-15 July 2005)	A/60/17, paras. 85-88
WG.IV, 44th session (Vienna, 11-22 October 2004)	A/CN.9/571, paras. 167-172
WG.IV, 42nd session (Vienna, 17-21 November 2003)	A/CN.9/546, paras. 106-116
WG.IV, 41st session (New York, 5-9 May 2003)	A/CN.9/528, paras. 109-120
WG.IV, 39th session (New York, 11-15 March 2002)	A/CN.9/509, paras. 74-85

**Article 12. Use of automated message systems  
for contract formation**

**A contract formed by the interaction of an automated message system and a natural person, or by the interaction of automated message systems, shall not be denied validity or enforceability on the sole ground that no natural person reviewed or intervened in each of the individual actions carried out by the automated message systems or the resulting contract.**

**1. Purpose of the article**

12. Automated message systems, sometimes called “electronic agents”, are being used increasingly in electronic commerce and have caused scholars in some legal systems to revisit traditional legal theories of contract formation to assess their adequacy to contracts that come into being without human intervention.

13. Existing uniform law conventions do not seem in any way to preclude the use of automated message systems, for example, for issuing purchase orders or processing purchase applications. This seems to be the case in connection with the United Nations Sales Convention, which allows the parties to create their own rules, for example, in an electronic data interchange (EDI) trading partner agreement regulating the use of “electronic agents”. The UNCITRAL Model Law on Electronic Commerce also lacks a specific rule on the matter. While nothing in the Model Law seems to create obstacles to the use of fully automated message systems, it does not deal specifically with those systems, except for the general rule on attribution in article 13, paragraph 2 (b).

14. Even if no modification appeared to be needed in general rules of contract law, UNCITRAL considered that it would be useful for the Convention to make provisions to facilitate the use of automatic message systems in electronic commerce. A number of jurisdictions have found it necessary or at least useful to enact similar provisions in domestic legislation on electronic commerce (A/CN.9/546, paras. 124-126). Article 12 of the Convention embodies a non-discrimination rule intended to make it clear that the absence of human review of or intervention in a particular transaction does not by itself preclude contract formation. Therefore, while a number of reasons may otherwise render a contract invalid under domestic law, the sole fact that automated message systems were used for purposes of contract formation will not deprive the contract of legal effectiveness, validity or enforceability.

**2. Attribution of actions performed by automated message systems**

15. At present, the attribution of actions of automated message systems to a person or legal entity is based on the paradigm that an automated message system is

capable of performing only within the technical structures of its preset programming. However, at least in theory it is conceivable that future generations of automated information systems may be created with the ability to act autonomously, and not just automatically. That is, through developments in artificial intelligence, a computer may be able to learn through experience, modify the instructions in its own programs, and even devise new instructions.

16. Already during the preparation of the Model Law on Electronic Commerce, UNCITRAL had taken the view that that, while the expression “electronic agent” had been used for purposes of convenience, the analogy between an automated message system and a sales agent was not appropriate. General principles of agency law (for example, principles involving limitation of liability as a result of the faulty behaviour of the agent) could not be used in connection with the operation of such systems. UNCITRAL also considered that, as a general principle, the person (whether a natural person or a legal entity) on whose behalf a computer was programmed should ultimately be responsible for any message generated by the machine (A/CN.9/484, paras. 106 and 107).

17. Article 12 is an enabling provision, and should not be misinterpreted as allowing for an automated message system or a computer to be made the subject of rights and obligations. Electronic communications that are generated automatically by message systems or computers without direct human intervention should be regarded as “originating” from the legal entity on behalf of which the message system or computer is operated. Questions relevant to agency that might arise in that context are to be settled under rules outside the Convention.

### **3. Means of indicating assent and extent of human intervention**

18. When a contract is formed by the interaction of an automated message system and a natural person, or by the interaction of automated message systems, there are several ways to indicate the contracting parties’ assent. Computers may exchange messages automatically according to an agreed standard, or a person may indicate assent by touching or clicking on a designated icon or place on a computer screen. Article 12 does not attempt to illustrate the ways in which assent may be expressed out of a concern to respect technological neutrality and because any illustrative list would carry the risk of being incomplete or becoming dated, as other means of indicating assent not expressly mentioned might already be in use or might possibly become widely used in the future (A/CN.9/509, para. 89).

19. The central rule in the article is that the validity of a contract does not require human review of each of the individual actions carried out by the automated message system or the resulting contract. For the purposes of the article, it is irrelevant whether all message systems involved are fully automated or merely semi-automated (for example, where some actions are only effected following some form of human intervention), as long as at least one of them does not need human “review or intervention”, to complete its task (A/CN.9/527, para. 114).

#### *References to preparatory work:*

UNCITRAL, 38th session (Vienna, 4-15 July 2005)	A/60/17, paras. 89-92
WG.IV, 44th session (Vienna, 11-22 October 2004)	A/CN.9/571, paras. 173-174
WG.IV, 39th session (New York, 11-15 March 2002)	A/CN.9/509, paras. 99-103

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*Article 13. Availability of contract terms*

**Nothing in this Convention affects the application of any rule of law that may require a party that negotiates some or all of the terms of a contract through the exchange of electronic communications to make available to the other party those electronic communications that contain the contractual terms in a particular manner, or relieves a party from the legal consequences of its failure to do so.**

**1. Contract terms in electronic commerce**

20. Except for purely oral transactions, most contracts negotiated through traditional means result in some tangible record of the transaction to which the parties can refer in case of doubt or dispute. In electronic contracting, such a record, which may exist as a data message, may only be temporarily retained or may be available only to the party through whose information system the contract was concluded. Thus, some recent legislation on electronic commerce requires that a person offering goods or services through information systems accessible to the public should provide means for storage or printing of the contract terms.

21. The rationale for creating such specific obligations seems to be an interest in enhancing legal certainty, transparency and predictability in international transactions concluded by electronic means. Thus, some domestic regimes require certain information to be provided or technical means to be offered in order to make available contract terms in a way that allows for their storage and reproduction, in the absence of a prior agreement between the parties, such as a trading partner agreement or other type of agreement.

22. Domestic laws contemplate a wide variety of consequences for failure to comply with requirements concerning the availability of contract terms negotiated electronically. Some legal systems provide that failure to make the contract terms available constitutes an administrative offence and subject the infringer to payment of a fine. In other jurisdictions, the law gives the customer the right to seek an order from any court having jurisdiction in relation to the contract requiring that service provider to comply with that requirement. Under yet other systems, the consequence is an extension of the period within which a consumer may avoid the contract, which does not begin to run until the time when the merchant has complied with its obligations. In most cases, these sanctions do not exclude other consequences that may be provided in law, such as sanctions under fair competition laws.

**2. Non-interference with domestic requirements**

23. UNCITRAL considered carefully the desirability of including provisions that require a party to make available the terms of contracts negotiated electronically. It was noted that no similar obligations exist under the United Nations Sales Convention or most international instruments dealing with commercial contracts. UNCITRAL was therefore faced with the question of whether, as a matter of principle, it should propose specific obligations for parties conducting business electronically that do not exist when they contract through more traditional means.

24. UNCITRAL recognized that, when parties negotiate through open networks, such as the Internet, there may be a concrete risk that they would be requested to agree to certain terms and conditions displayed by a vendor, but might not have

access to those terms and conditions at a later stage. This situation, which does not only concern consumers, as it may happen in negotiations between business entities or professional traders, may be unfavourable to the party accepting the contractual terms of the other party. It was argued that this problem does not have the same magnitude in the non-electronic environment, since, except for purely oral contracts, the parties would in most cases have access to a tangible record of the terms governing their contract (A/CN.9/546, para. 134). It was also argued that a duty to make available the terms of contracts negotiated electronically, and possibly also subsequent changes in standard contractual conditions would encourage good business practice and would be equally beneficial for business-to-business and for business-to-consumer commerce (A/CN.9/571, para. 178).

25. The final decision, however, was not in favour of introducing a duty to make available contract terms, as it was felt that this approach would result in imposing rules that do not exist in the context of paper-based transactions, thus departing from the policy that the Convention should not create a duality of regimes governing paper-based contracts on the one hand and electronic transactions on the other (A/CN.9/509, para. 123). It was also considered that it would not be feasible to formulate an appropriate set of possible consequences for failure to comply with a requirement to make available contract terms and that it would be pointless to establish this type of duty in the Convention if no sanction was created (A/CN.9/571, para. 179). For example, UNCITRAL discarded the possibility of rendering commercial contracts invalid for failure to comply with a duty to make contract terms available, because of the unprecedented nature of that solution, as other texts, such as the United Nations Sales Convention, have not dealt with the validity of contracts. On the other hand, providing for other types of sanction, such as tort liability or administrative sanctions was felt to be outside the scope of a uniform instrument on commercial law (A/CN.9/571, para. 177).

26. Article 13 was retained as a reminder for parties that the facilitative rules on the Convention do not relieve them from any obligation they may have to comply with domestic legal requirements that may impose a duty to make contract terms available, for instance pursuant to regulatory regimes governing the provision of online services, especially under consumer protection regulations (A/CN.9/509, para. 63).

### **3. Nature of legal requirements on availability of contract terms**

27. The phrase “any rule of law” in this article has the same meaning as the words “the law” in article 9. They encompass statutory, regulatory and judicially created laws as well as procedural laws but do not cover laws that have not become part of the law of the State, such as *lex mercatoria*, even though the expression “rules of law” is sometimes used in that broader meaning (A/60/17, para. 94). [why past tense?]

#### *References to preparatory work:*

UNCITRAL, 38th session (Vienna, 4-15 July 2005)	A/60/17, paras. 93-94
WG.IV, 44th session (Vienna, 11-22 October 2004)	A/CN.9/571, paras. 175-181
WG.IV, 42nd session (Vienna, 17-21 November 2003)	A/CN.9/546, paras. 130-135
WG.IV, 39th session (New York, 11-15 March 2002)	A/CN.9/509, paras. 122-125

*Article 14. Error in electronic communications*

**1. Where a natural person makes an input error in an electronic communication exchanged with the automated message system of another party and the automated message system does not provide the person with an opportunity to correct the error, that person, or the party on whose behalf that person was acting, has the right to withdraw the portion of the electronic communication in which the input error was made if:**

**(a) The person, or the party on whose behalf that person was acting, notifies the other party of the error as soon as possible after having learned of the error and indicates that he or she made an error in the electronic communication; and**

**(b) The person, or the party on whose behalf that person was acting, has not used or received any material benefit or value from the goods or services, if any, received from the other party.**

**2. Nothing in this article affects the application of any rule of law that may govern the consequences of any error other than as provided for in paragraph 1.**

**1. Electronic commerce and errors**

28. The question of mistakes and errors is closely related to the use of automated message systems in electronic commerce. Such errors may be either the result of human actions (for example, typing errors) or the consequence of malfunctioning of the message system used.

29. Recent legislation on electronic commerce, including some domestic enactments of the UNCITRAL Model Law, contain provisions dealing with errors made by natural persons when dealing with an automated computer system of another person, typically by setting out the conditions under which a natural person is not bound by a contract in the event that the person made an error in an electronic communication. The rationale for these provisions seems to be the relatively higher risk that an error made in transactions involving a natural person, on the one hand, and an automated computer system, on the other, might not be noticed, as compared with transactions that involve only natural persons. Errors made by the natural person in such a situation may become irreversible once acceptance is dispatched. Indeed, in a transaction between individuals there is a greater ability to correct the error before parties have acted on it. However, when an individual makes an error while dealing with the automated message system of the other party, it may not be possible to correct the error before the other party has shipped or taken other action in reliance on the erroneous communication.

30. UNCITRAL considered carefully the desirability of dealing with errors in the Convention. It was noted that the UNCITRAL Model Law on Electronic Commerce, which is not concerned with substantive issues that arise in contract formation, does not deal with the consequences of mistake and error in electronic contracting. Furthermore, article 4, subparagraph (a), of the United Nations Sales Convention expressly provides that matters related to the validity of a sales contract are excluded from its scope, although other international texts, such as the UNIDROIT

Principles of International Commercial Contracts, deal with the consequences of errors for the validity of the contract, albeit restrictively.<sup>2</sup>

31. UNCITRAL was mindful of the need to avoid undue interference with well-established notions of contract law and the creation of specific rules for electronic transactions that might vary from rules that apply to other modes of negotiation. Nevertheless, it felt that there was a need for a specific provision dealing with narrowly defined types of errors in the light of the relatively higher risk of human errors being made in online transactions made through automated message systems than in more traditional modes of contract negotiation (A/CN.9/509, para. 105). The contract law of some legal systems further confirms the need for the article, for example, in view of rules that require a party seeking to avoid the consequences of an error to show that the other party knew or ought to have known that a mistake had been made. While there are means of providing such proof if there is an individual at each end of the transaction, awareness of the mistake is almost impossible to demonstrate when there was an automated process at the other end (A/CN.9/548, para. 18).

## **2. Scope and purpose of the article**

32. Article 14 applies to a very specific situation. It is only concerned with errors that occur in transmissions between a natural person and an automated message system when the system does not provide the person with the possibility to correct the error. The conditions for withdrawal or avoidance of electronic communications affected by errors that occur in any other context are left for domestic law (A/60/17, para. 96).

33. The article deals only with errors made by a natural person, as opposite to a computer or other machine. However, the right to withdraw the portion of the electronic communication is not a right of the natural person but of the party on whose behalf the person was acting (A/CN.9/548, para. 22).

34. Generally, errors made by any automated system should ultimately be attributable to the persons on whose behalf they operated. However, already during the preparation of the UNCITRAL Model Law on Electronic Commerce, it was argued that some circumstances might call for a mitigation of this principle, such as when an automated system generated erroneous messages in a manner that could not have reasonably been anticipated by the person on whose behalf the messages were sent. In practice, the extent to which the party on whose behalf an automated message system is operated is responsible for all its actions may depend on various factors such as the extent to which the party has control over the software or other technical aspects used in programming the system (A/CN.9/484, para. 108). Given the complexity of these questions, in respect of which domestic law may give varying answers depending on the factual situation, it was felt that it would not be appropriate to attempt to formulate uniform rules at the present stage and that jurisprudence should be allowed to evolve.

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<sup>2</sup> UNIDROIT Principles of International Commercial Contracts, arts. 3.5 and 3.6.

### 3. “Opportunity to correct errors”

35. Article 14 authorizes a party who makes an error to withdraw the portion of the electronic communication where the error was made if the automated message system did not provide the person with an opportunity to correct errors. The article does oblige the party on whose behalf the automated message system operates to make available procedures for detecting and correcting errors in electronic contract negotiation.

36. UNCITRAL considered the desirability of introducing such a general obligation, as an alternative for dealing with the right of the parties after an error has occurred. Such an obligation exists in some domestic systems, but the consequences for a party’s failure to provide procedures for detecting and correcting errors in electronic contract negotiation vary greatly from country to country. In some jurisdictions, such failure constitutes an administrative offence and subjects the infringer to payment of a fine. In other countries the consequence is either to entitle a customer to rescind the contract or to extend the period within which a consumer may unilaterally cancel an order. The type of consequence provided in each case depends on the type of regulatory approach taken to electronic commerce. During the preparation of the Convention it was felt that, however desirable such an obligation might be in the interest of promoting good business practices, the Convention would not be an appropriate place for it, since the Convention could not provide a complete system of sanctions appropriate for all circumstances (A/CN.9/509, para. 108). The agreement eventually reached on this point was that, instead of requiring generally that an opportunity to correct errors should be provided, the Convention should limit itself to providing a remedy for the person making the error (A/CN.9/548, para. 19).

37. Article 14 deals with the allocation of risks concerning errors in electronic communications in a fair and sensible manner. An electronic communication can only be withdrawn if the automated message system did not provide the originator with an opportunity to correct the error before sending the electronic communication. If no such system is in place, the party on whose behalf the automated message system operates bears the risk of errors that may occur. Thus, the article gives an incentive to parties acting through automated message systems to build in safeguards that enable their contract partners to prevent the sending of an erroneous communication, or correct the error once sent. For example, the automated message system may be programmed to provide a “confirmation screen” to the person setting forth all the information the individual initially approved. This would provide the person with the ability to prevent the erroneous communication from ever being sent. Similarly, the automated message system might receive the communication sent by the person and then send back a confirmation which the person must again accept before the transaction is completed. This would allow for correction of an erroneous communication. In either case, the automated message system would “provide an opportunity to correct the error,” and the article would not apply. Rather, other law would govern the effect of any error.

### 4. Notion and proof of “input error”

38. Article 14 is only concerned with “input” errors, that is, errors relating to inputting wrong data in communications exchanged with an automated message system. These are typically unintentional keystroke errors, which are felt to be

potentially more frequent in transactions made through automated information systems than in more traditional modes of contract negotiation. For example, while it would be unlikely for a person to deliver documents unintentionally to a post office, in practice there were precedents where persons had claimed not to have intended to confirm a contract by hitting “Enter” on a computer keyboard or clicking on an “I agree” icon on a computer screen.

39. The article is not intended to be media-neutral, since it deals with a specific issue affecting certain forms of electronic communications. In doing so, article 14 does not overrule existing law on error, but merely offers a meaningful addition to it by focusing on the importance of providing means of having the error corrected (A/CN.9/548, para. 17). Other types of error are left for the general doctrine of error under domestic law (A/CN.9/571, para. 190).

40. As is already the case in a paper-based environment, the factual determination as to whether or not an input error has indeed occurred is a matter that needs to be assessed by the courts in the light of the entire evidence and relevant circumstances, including the overall credibility of a party’s assertions (A/CN.9/571, para. 186). The right to withdraw an electronic communication is an exceptional remedy to protect a party in error and not a blank opportunity for parties to repudiate disadvantageous transactions or nullify what would otherwise be valid legal commitments freely accepted. This right is justified by the consideration that a reasonable person in the position of the originator would not have issued the electronic communication, had that person been aware of the error at that time. However, article 14 does not require a determination of the intent of the party who sent the allegedly erroneous message. If the operator of the automated message system fails to offer means for correcting errors despite the clear incentive to do so in article 14, it is reasonable to make such party bear the risk of errors being made in electronic communications exchanged through the automated message system. Limiting the right of the party in error to withdraw the messages would not further the intended goal of the provision to encourage parties to provide for an error-correction method in automated message systems (A/60/17, para. 97).

## 5. “Withdraw”

41. Article 14 does not invalidate an electronic communication in which an input error is made. It only gives the person in error the right to “withdraw” the portion of the electronic communication in which the error was made. The term “withdraw” was deliberately used instead of other alternatives, such as “avoiding the consequences” of the electronic communication or similar expressions that might be interpreted as referring to the validity of an act and lead to discussions as to whether the act was null and void or avoidable at the party’s request.

42. Furthermore, article 14 does not provide for a right to “correct” the error made. During the preparation of the Convention it was argued that the remedy should be limited to the correction of an input error, so as to reduce the risk that a party would allege an error as an excuse to withdraw from an unfavourable contract. Another proposal was that the person who makes an input error should have a choice to “correct or withdraw” the electronic communication in which the error was made. This possibility, it was argued, would cover both situations where correction was the appropriate remedy for the error (such as typing the wrong quantity in an order) and situations where withdrawal would be a better remedy

(such as when a person unintentionally hit a wrong key or an “I agree” button and sent a message he or she did not intend to send) (A/CN.9/571, para. 193).

43. After extensive consideration of those options, UNCITRAL agreed that the person who makes an error should only have the right to withdraw the portion of the electronic communication in which the error was made. In most legal systems, the typical consequence of an error is to make it possible for the party in error to avoid the effect of the transaction resulting from its error, but not necessarily to restore the original intent and enter into a new transaction. While withdrawal may in most cases equate to nullification of a communication, correction would require the possibility to modify the previous communication. UNCITRAL was not willing to create a general right to “correct” erroneous communications, as this would have introduced additional costs for system providers and given remedies with no parallel in the paper world, a result which the Working Group had previously agreed to avoid. A right to correct electronic communications would also cause practical difficulties, as operators of automated message systems may more readily provide an opportunity to nullify a communication already recorded than an opportunity to correct errors after a transaction was concluded. Furthermore, a right to correct errors might entail that an offeror who received an electronic communication later alleged to contain errors must keep its original offer open since the other party had effectively replaced the communication withdrawn (A/60/17, para. 98).

**6. The “portion of the electronic communication in which the input error was made”**

44. The right to withdraw relates only the part of the electronic communication where the error was made, if the information system so allows. This has the dual scope of granting to parties the possibility to redress errors in electronic communications, when no means of correcting errors are made available, and of preserving as much as possible the effects of the contract, by correcting only the portion vitiated by the error, in line with the general principle of preservation of contracts (A/CN.9/571, para. 195).

45. Article 14 does not expressly establish the consequences of the withdrawal of the portion of an electronic communication in which an error was made. It is understood that, depending on the circumstances, the withdrawal of a portion of an electronic communication may invalidate the entire communication or render it ineffective for purposes of contract formation (A/60/17, para. 100). For example, if the portion withdrawn contains the reference to the nature of the goods being ordered, the electronic communication would not be “sufficiently definite” for purposes of contract formation under article 14, paragraph 1, of the United Nations Sales Convention. The same conclusion should apply if the portion withdrawn concerns price or quantity of goods and there are no other elements left in the electronic communication according to which they could be determined. However, withdrawal of a portion of the electronic communication that concerned matters that are not, by themselves or pursuant to the intent of the parties, essential elements of the contract, may not necessarily devoid the electronic communication of its effectiveness.

## 7. Conditions for withdrawing an electronic communication

46. Subparagraphs 1 (a) and 1 (b) establish two conditions for a party to exercise the right to withdraw: to notify the other party as soon as possible and not to have used or received any material benefit or value from the goods or services, if any, received from the other party.

47. UNCITRAL considered extensively whether the right to withdraw the electronic communication should be limited in any way, in particular as the conditions contemplated in article 14 may differ from the consequences of avoidance of contracts under some legal systems (see A/CN.9/548, para. 23). It was, however, felt that the conditions set forth in subparagraphs 1 (a) and 1 (b) provide a useful remedy for cases in which the automated message system proceeds to deliver physical or virtual goods or services immediately upon conclusion of the contract, with no possibility to stop the process. UNCITRAL considered that in those cases subparagraphs 1 (a) and 1 (b) provide a fair basis for the exercise of the right of withdrawal and would also tend to limit abuses by parties acting in bad faith (A/CN.9/571, para. 203).

### (a) *Notice of error and time limit for withdrawing an electronic communication*

48. Subparagraph 1 (a) requires the natural person or the party on whose behalf the person was acting to take prompt action to advise the other party of the error and the fact that the individual did not intend the electronic record. Whether the action is prompt must be determined from all the circumstances including the person's ability to contact the other party. The natural person or the party on whose behalf the person was acting should advise the other party both of the error and of the lack of intention to be bound (i.e. avoidance) by the portion of the electronic communication in which the error occurred. However, the party receiving the message should be able to rely on the message, despite the error, up to the point of receiving a notice of error (A/CN.9/548, para. 24).

49. In some domestic systems that require the operator of automated message systems used for contract formation to provide an opportunity to correct errors, the right to withdraw or avoid a communication must be exercised at the moment of reviewing the communication before dispatch. Under those systems, the party who makes an error cannot withdraw the communication after it has been confirmed. Article 14 does not limit the right to withdrawal in this way, since in practice, a party may only become aware that it has made an error at a later stage, for instance, when it receives goods of a type or in a quantity different from what it had originally intended to order (A/CN.9/571, para. 191).

50. Furthermore, article 14 does not deal with the time limit for exercising the right of withdrawal in case of input error, as time limits are a matter of public policy in many legal systems. Nevertheless, the parties are not exposed to indefinite withdrawal. The combined impact of subparagraphs 1 (a) and 1 (b) limits the time within which an electronic communication could be withdrawn, since withdrawal has to occur "as soon as possible", but in any event not later than the time when the party had used or received any material benefit or value from the goods or services received from the other party (A/60/17, para. 103).

*(b) Loss of right to withdraw an electronic communication*

51. It should be noted that goods or services may have been provided on the basis of an allegedly erroneous communication before receipt of the notice required by subparagraph 1 (a). Subparagraph 1 (b) avoids unjustified windfalls to the natural person or the party on whose behalf that person was acting by erecting stringent requirements before the party in error may exercise the right of withdrawal under the paragraph. Under this provision a party loses the right to withdrawal when the person received material benefits or value from the vitiated communication (A/60/17, para. 102).

52. UNCITRAL recognized that such a limitation in the right to invoke an error in order to avoid the consequences of a legally relevant act may not exist in all legal systems under general contract law. The risk of illegitimate windfalls for a person who successfully avoids a contract is usually dealt with by legal theories such as restitution or unjust enrichment. Nevertheless, it was felt that the particular context of electronic commerce justifies establishing a particular rule to avoid that risk.

53. Various transactions in electronic commerce may be concluded nearly instantaneously and generate immediate value or benefit for the party purchasing the relevant goods or services. In many cases, it may be impossible to restore the conditions as they existed prior to the transaction. For example, if the consideration received is information, it may not be possible to avoid the benefit conferred. While the information itself could be returned, mere access to the information, or the ability to redistribute the information would constitute a benefit that could not be returned. It may also occur that the mistaken party receives consideration that changes in value between the time of receipt and the first opportunity to return. In such a case restitution cannot be made adequately. In all these cases it would not be equitable to allow that, by withdrawing the portion of the electronic communication in which an error was made, a party could avoid the entire transaction while effectively retaining the benefit gained from it. This limitation is further important in view of the large number of electronic transactions involving intermediaries that may be harmed because transactions cannot be unwound.

**8. Relationship to general law on mistake**

54. The underlying purpose of article 14 is to provide a specific remedy in respect of input errors that occur under particular circumstances and not to interfere with the general doctrine on error under domestic laws (A/60/17, para. 104). If the conditions set forth in paragraph 1 are not met (that is, if the error is not an “input” error made by a natural person, or if the automated message system did in fact provide the person with an opportunity to correct the error), the consequences of the error would be as provided for by other laws, including the law on error, and by any agreement between the parties (A/CN.9/548, para. 20).

*References to preparatory work:*

UNCITRAL, 38th session (Vienna, 4-15 July 2005)	A/60/17, paras. 95-103
WG.IV, 44th session (Vienna, 11-22 October 2004)	A/CN.9/571, paras. 182-206
WG.IV, 43rd session (New York, 15-19 March 2004)	A/CN.9/548, paras. 14-26
WG.IV, 39th session (New York, 11-15 March 2002)	A/CN.9/509, para. 99 and paras. 104-111