United Nations A/CN.9/WG.IV/WP.104/Add.4

General Assembly

Distr.: Limited
16 September 2003

Original: English

United Nations Commission on International Trade Law
Working Group IV (Electronic Commerce)
Forty-second session
Vienna, 17-21 November 2003

Legal aspects of electronic commerce

Electronic contracting: background information

Note by the Secretariat*

Addendum

Contents

* Submission of the present document by the secretariat of the United Nations Commission on International Trade Law was delayed by a few days owing to shortage of staff.

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III. Issues related to the use of data messages in international contracts

D. Automated information systems

1. Automated computer systems, sometimes called "electronic agents", are being used increasingly in electronic commerce and have caused scholars, in particular in the United States of America, to revisit traditional common law theories of contract formation to assess their adequacy to contracts that come into being without human intervention.[1]

2. Existing uniform law conventions do not seem in any way to preclude the use of automated systems, for example, for issuing purchase orders or processing purchase applications. This seems to be the case in connection with the United Nations Convention on Contracts for the International Sale of Goods ("the United Nations Sales Convention"),[2] which allows the parties to create their own rules,[3] 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 systems, it does not deal specifically with those systems, except for the general rule on attribution in article 13, paragraph 2 (b).[4]

1. Responsibility for automated information systems

3. In an early discussion of the matter, the Working Group was of the view that, while the expression "electronic agent" had been used for purposes of convenience, the analogy between an automated 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. The Working Group was also of the view 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).

4. At present, the attribution of actions of automated information systems to a person or legal entity is based on the paradigm that an automated information 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 their own programs, and even devise new instructions".[5] That possibility has led some commentators to go as far as to advocate the attribution of at least some elements of legal personality to automated computer systems[6] or to a transposition of the general theory of agency to computer transactions.[7] Other commentators, however, seem less inclined to impose liability upon machines and prefer to apply general principles of law, such as "reliance" and "good faith", to establish the link between the computer and the person on whose behalf it functions.[8]

5. Even if no modification appears to be needed in general rules of contract law, it might be useful for a new international instrument to make it clear that the actions of automated systems programmed and used by people will bind the user of the system, regardless of whether human review of a particular transaction has occurred.

2. Errors in messages and communications

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

(a) Human errors

7. Since the Model Law is not concerned with substantive issues that arise in contract formation, it does not deal with the consequences of mistake and error in electronic contracting. However, recent uniform legislation enacting the Model Law, such as the Uniform Electronic Commerce Act of Canada (UECA) and the United States Uniform Electronic Transactions Act (UETA), contain provisions dealing with errors made by natural persons when dealing with an automated computer system of another person. The relevant provisions in UECA (sect. 22) and in UETA (sect. 10) set out the conditions under which a natural person is not bound by a contract in the event that the person made a material error.

8. The rationale for provisions such as those contained in UECA and in UETA 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.

9. In favour of formulating a substantive rule on the consequences of computer errors, it could be said that 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 (see arts. 3.5 and 3.6). However, a counter-argument could be that a provision of that type would interfere with well-established notions of contract law and might not be appropriate in the context of an instrument specifically concerned with electronic commerce, in view of the risk of duplication of legal regimes (see A/CN.9/WG.IV/WP.96, p. 4, and A/CN.9/WG.IV/WP.101, p. 3).

10. A slightly different approach might be to envisage only provisions that promote best business practices, such as provisions that would induce businesses to make available procedures for detecting and correcting errors in electronic contract negotiation, without dealing with the consequences of errors for the validity of the contract. Article 11, paragraph 2, of Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000[9] on certain legal aspects of information society services, in particular electronic commerce, in the internal market creates such an obligation for providers of “information society services”. It is recognized, however, that, in implementing the EU Directive, States have added various consequences for a party’s failure to provide procedures for detecting and correcting errors in electronic contract negotiation. For example, in Austria,[10]

Ireland,[11] Italy[12] and Spain,[13] such failure constitutes an administrative offence and subjects the infringer to payment of a fine.[14] In Germany,[15] the consequence is an extension of the period within which a consumer may avoid a contract, which only begins to run from the time when the merchant has fulfilled its obligations. A similar consequence is provided in the United Kingdom of Great Britain and Northern Ireland, where the customer "shall be entitled to rescind the contract unless any court having jurisdiction in relation to the contract in question orders otherwise on the application of the service provider".[16]

(b) Errors generated by information systems

11. Another issue that has been proposed for consideration by the United Nations Commission on International Trade Law (UNCITRAL) is whether a new international instrument should deal with errors made by the automated system itself. At its initial discussion of the issue, the UNCITRAL Working Group on Electronic Commerce was of the view that errors made by any such system should ultimately be attributable to the persons on whose behalf they operated. Nevertheless, the Working Group recognized that there might be circumstances that justified a mitigation of that 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. It was suggested that elements to be taken into account when considering possible limitations for the responsibility of the party on whose behalf the automated system was operated included the extent to which the party had control over the software or other technical aspects used in programming the system (A/CN.9/484, para. 108).

12. The complexity of the issues involved can be illustrated by three very similar cases where German courts arrived at opposing results.[17] The cases related to sales of goods erroneously offered over the Internet for a price below the price intended by the seller. They all involved interactive applications that generated automatic replies from the seller stating that the customer's "order" (*Auftrag*) would be immediately "carried out" (*ausgeführt*). It was surmised that the errors were computer-made and had occurred during processing and posting of the seller's information on web sites maintained by independent Internet service providers. The courts affirmed the principle that automated communications were attributable to the persons on whose behalf the system had been programmed and in whose names the messages were sent. The courts consistently regarded the advertisement of goods via the Internet as a mere invitation to treat (*invitatio ad offerendum*) and considered that a binding contract would only come into being once the seller had accepted the buyer's bid (offer). The courts further affirmed the legal value of the messages sent by the automatic reply function as binding expressions of intention (*Willenserklärung*) and valid acceptances for purposes of contract formation.

13. Nevertheless, one court of appeals found that the pricing error in the Internet advertisement vitiated the seller's acceptance and rendered it invalid.[18] Two district courts, in turn, regarded the invitation to treat expressed through the Internet advertisement as a separate legal act from the eventual acceptance of the buyer's offer, so that the error in the first instance did not affect the validity of the seller's acceptance.[19] While some factual differences between the cases might have influenced their outcome,[20] the discrepancy between the judgements seems to result

from conflicting views regarding the allocation of risks for malfunctioning of commercial web sites.

E. Incorporation and availability of contract terms

14. One additional question concerning contract formation through the intervention, in whole or in part, of automated information systems is the legal effect of the incorporation by reference of contractual clauses accessible through a "hypertext link". Another issue relates to the availability and retention or reproduction of contract terms.

1. Incorporation of terms and conflicting contract terms

15. The question of incorporation of contract terms is dealt with in article 5 bis of the Model Law. That provision sets out the general rule that information shall not be denied validity or enforceability solely because it has been incorporated by reference. Domestic laws typically go beyond that general rule and set down the substantive conditions for the enforceability of terms incorporated by reference. In doing so, it seems that courts make a distinction between terms formulated by one party, which seeks to enforce them against the other party, and terms established by a third party and intended to apply to all transactions being negotiated in a particular market or through a particular facility offered by such third party. In the first situation, courts in many legal systems seem not to automatically assume a party's acceptance of the terms incorporated by reference. Courts have in fact required a specific act of incorporation and held that the mere existence of such terms in an easily accessible resource (such as a party's web site) was not sufficient to effectively incorporate those terms into a contract in which they were not otherwise referred to.[21] The courts do not seem to have categorically excluded the possibility of incorporating terms by the mere clicking of an "I agree" button on a computer screen.[22] Yet, courts have often required unambiguous demonstration that the accepting party either had an opportunity to actually access and read those terms or that the party was adequately alerted, through a conspicuously placed notice or otherwise, of the existence of those terms and their relevance for the transaction in question.[23]

16. In some legal systems, courts seem to establish a distinction between contractual terms developed by one of the parties and contract terms developed by another entity (a third party) that offers the electronic platform for the parties to conduct their negotiations. This question has arisen, for instance, in connection with Internet auctions in Germany. In an early case, a district court in Germany found that a person offering goods through an Internet auction platform had not made a binding offer, but had merely invited offers in respect of the goods during a set period of time.[24] The fact that the general conditions of the operator of the auction platform qualified the offer of goods for auction as "binding and irrevocable" was not regarded as being controlling. That decision was later reversed by the court of appeal, which found that there was no need for the parties to specifically refer to or otherwise incorporate into their communications the general conditions of the operator of the auction platform, which highlighted the binding character of offers of goods for auction. Both parties should be deemed to have accepted those general conditions beforehand.[25] This understanding has been followed by other courts[26]

and was also affirmed by the Federal Court (*Bundesgerichtshof*), which held that the seller could have avoided, if it had wished, the impression of being bound by its offer by introducing an appropriate statement in its automatic reply messages. However, a reservation to the general conditions that was not recognizable as such by the addressees of the offer could not be held against them.[27]

17. Another question concerning contract formation through automated information systems is the legal effect of contract terms displayed on a video screen but not necessarily expected by a party. Directly related to this question is the issue of the "battle of the forms", which may be a serious problem in the context of electronic transactions, in particular where fully automated systems are used and no means are provided for reconciling conflicting contractual terms.

18. Neither of these issues is dealt with in article 5 bis of the Model Law, which only contains a general provision intended to uphold the legal effect of information incorporated by reference. Furthermore, neither the Model Law nor the United Nations Sales Convention expressly provide a solution for the well-known problem of "battle of the forms".[28] The magnitude of the problem and the profound differences, both in policy and approach, in the manner in which those issues are addressed under domestic laws[29] suggest that there would be significant obstacles for international harmonization.

2. Availability of contract terms

19. 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, such as the EU Directive, 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.

20. 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, it may not be unreasonable to 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.

21. No similar obligations exist under the United Nations Sales Convention or most international instruments dealing with commercial contracts. The Working Group has been faced with the question of whether, as a matter of principle, it should propose specific obligations for parties conducting business electronically that may not exist when they contract through more traditional means. One objection to the inclusion of disclosure obligations in a new international uniform law instrument has been that the consequences of a party failing to comply with any such obligation would have to be considered and well defined (see A/CN.9/WG.IV/WP.96, annex, p. 6).

22. The views within the Working Group are thus far divided between two groups. One view is that obligations to disclose certain information should be left for international industry standards or guidelines or, at the national level, for regulatory regimes governing the provision of online services, especially under consumer protection regulations, but should not be included in an international convention dealing with electronic contracting (A/CN.9/509, para. 63). The other view is that disclosure obligations of certain basic information about a business entity would promote good business practices and enhance confidence in electronic commerce (A/CN.9/509, para. 64).

23. The experience with the EU Directive does not prescribe what the consequences are if "information society services" fail to comply with its provisions on this point. In the absence of uniform sanctions, EU member States have provided a variety of different consequences in their national laws.[30] The laws of Austria,[31] Ireland,[32] Italy[33] and Spain,[34] for example, provide that failure to make the contract terms available constitutes an administrative offence and subject the infringer to payment of a fine.[35] In the United Kingdom, the law distinguishes between disclosure of information and availability of contract terms. In the first case, those duties "shall be enforceable, at the suit of any recipient of a service, by an action against the service provider for damages for breach of statutory duty".[36] In the second case, the customer "may seek an order from any court having jurisdiction in relation to the contract requiring that service provider to comply with that requirement".[37] In Germany, 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.[38] In most cases, these sanctions do not exclude other consequences that may be provided in law, such as sanctions under fair competition laws.[39]

24. The Working Group may wish to consider whether the preliminary draft convention should include a uniform regime of consequences for failure to comply with draft article 15 and, if so, what kind of consequences might be appropriate. Arguably, rendering commercial contracts invalid for failure to comply with disclosure obligations may be an unprecedented solution for an UNCITRAL text, 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, would probably be outside the scope of the work that UNCITRAL has thus far done. One alternative that the Working Group may wish to explore might be rules that limit a party's right to rely on or enforce contract terms that have not been made available to the other party in accordance with draft article 15.

Notes

[1] See Anthony J. Bellia, Jr., "Contracting with electronic agents", *Emory Law Journal*, vol. 50, fall 2001, p. 1047-1092.

[2] United Nations, *Treaty Series*, vol. 1489, No. 25567, p. 3 (also available at www.uncitral.org/english/texts/sales/CISG.htm).

[3] United Nations Sales Convention, art. 9.

[4] Article 13, paragraph 2 (b), of the Model Law provides that, as between the originator and the addressee, a data message is deemed to be that of the originator if it was sent "by an

information system programmed by, or on behalf of, the originator to operate automatically".

[5] T. Allen and R. Widdison, "Can computers make contracts?", *Harvard Journal of Law and Technology*, vol. 9, winter 1996, pp. 25-52.

[6] For instance, Lawrence B. Solum, "Legal personhood for artificial intelligences", *North Carolina Law Review*, vol. 70, 1992, pp. 1231-1287; and Leon E. Wein, "The responsibility of intelligent artifacts: toward an automated jurisprudence", *Harvard Journal of Law and Technology*, vol. 6, 1992, pp. 103-154.

[7] David D. Wong, "The emerging law of electronic agents: e-commerce and beyond", *Suffolk University Law Review*, vol. 33, 1999, pp. 83-106.

[8] See Jean-François Lerouge, "The use of electronic agents questioned under contractual law: suggested solutions on a European and American level", *John Marshall Journal of Computer and Information Law*, vol. 18, winter 1999, pp. 403-433. Similarly, from a common law perspective, see C. C. Nicoll, "Can computers make contracts?", *The Journal of Business Law*, January 1998, p. 42.

[9] *Official Journal of the European Communities* No. L 17, 17 July 2000, pp. 1-16.

[10] *Bundesgesetz mit dem bestimmte rechtliche Aspekte des elektronischen Geschäfts- und Rechtsverkehrs geregelt (E-Commerce-Gesetz—ECG) und Änderung des Signaturgesetzes sowie der Zivilprozessordnung* (*Bundesgesetzblatt für die Republik Österreich*, 2001, p. 1977), sect. 26, para. 4.

[11] European Communities (Directive 2000/31/EC) Regulations 2003, regulation 13 (5).

[12] *Decreto legislativo 9 aprile 2003, n. 70*, art. 21, para. 1.

[13] *Ley 34/2002, de 11 de julio, de servicios de la sociedad de la información y de comercio electrónico*, arts. 38 and 39.

[14] *Bundesgesetz mit dem bestimmte rechtliche Aspekte des elektronischen Geschäfts- und Rechtsverkehrs geregelt (E-Commerce-Gesetz—ECG) und Änderung des Signaturgesetzes sowie der Zivilprozessordnung* (*Bundesgesetzblatt für die Republik Österreich*, 2001, p. 1977), sect. 26, para. 4.

[15] *Bürgerliches Gesetzbuch*, sect. 312e, para. 1, first sentence.

[16] Electronic Commerce (EC Directive) Regulations 2002 (Statutory Instrument 2002 No. 2013), regulation 15.

[17] Oberlandesgericht Frankfurt, 20 November 2002, *JurPC—Internet Zeitschrift für Rechtsinformatik*, JurPC WebDok 91/2003 (www.jurpc.de/rechtspr/20030091.htm); Landgericht Köln, 16 April 2003, *JurPC—Internet Zeitschrift für Rechtsinformatik,* JurPC WebDok 138/2003 (www.jurpc.de/rechtspr/20030138.htm); and Amtsgericht Westerburg, Case No. 21 C 26/03, 14 March 2003, *JurPC—Internet Zeitschrift für Rechtsinformatik*, JurPC WebDok 184/2003 (www.jurpc.de/rechtspr/20030184.htm). All accessed on 9 September 2003.

[18] Oberlandesgericht Frankfurt: "Die unrichtige Übermittlung der 'invitatio ad offerendum' wirkte bei der infolge der entsprechenden Programmierung automatisch erstellten und dann an den Rechner des Klägers elektronisch übermittelten Annahmeerklärung der Beklagten noch fort." (www.jurpc.de/rechtspr/20030091.htm).

[19] Landgericht Köln: "Eine auf diesen Irrtum gestützte Anfechtung kommt gleichwohl nicht in Betracht, weil der Irrtum nach dem klägerischen Sachvortrag allenfalls bei der Einstellung der Preisangaben ins Internet, nicht aber zum massgeblichen Zeitpunkt der Abgabe der Willenserklärung vorgelegen hat." (www.jurpc.de/rechtspr/20030138.htm). Similarly, Amtsgericht Westerburg (www.jurpc.de/rechtspr/20030184.htm).

[20] Such as the fact that in the Frankfurt case the erroneously advertised price represented 1 per cent of the ordinary value of the product, whereas in the Cologne case the court found that the price, which arguably fell some 50 per cent below the ordinary market price, was not extraordinary (keine Seltenheit) for an Internet sale.

[21] Hanseatisches Oberlandesgericht Hamburg, Case No. 3 U 168/00, 13 June 2002, *JurPC—Internet Zeitschrift für Rechtsinformatik*, JurPC WebDok 288/2002 (available at www.jurpc.de/rechtspr/20020288.htm, accessed on 1 September 2003).

[22] See *Lawrence Groff v. America Online, Inc.*, Superior Court of Rhode Island, 27 May 1998, LEXIS 46 (R.I. Super., 1998) (available at http://legal.web.aol.com/decisions/dlother/groff.html, accessed on 3 September 2003); *Hotmail Corp. v. Van$ Money Pie*, United States District Court for the Northern District of California, 16 April 1998, U.S. Dist. LEXIS 10729 (U.S. Dist.,

1998); *Steven J. Caspi et al. v. The Microsoft Network, L.L.C., et al*, Superior Court of New Jersey, Appellate Division, 2 July 1999 (New Jersey Superior Court Reports, vol. 323, p. 118); and *I. Lan Systems, Inc. v. Netscout Service Level Corp.*, United States District Court, District of Massachusetts, 2 January 2002 (Federal Supplement, 2nd series, vol. 183, p. 328).

[23] For instance, *Specht v. Netscape Communications Corp.*, Federal Supplement, 2nd series, vol. 150, p. 585, affirmed in *Specht v. Netscape Communications Corporation and America Online, Inc.*, United States Court of Appeals for the Second Circuit, 1 October 2002, Federal Reporter, 3rd series, vol. 306, p. 17.

[24] Landgericht Münster, 21 January 2000, Case No. 4 O 424/99, *JurPC—Internet Zeitschrift für Rechtsinformatik*, JurPC WebDok 60/2000 (available at www.jurpc.de/rechtspr/20000060.htm, accessed on 1 September 2003).

[25] Oberlandesgericht Hamm, 14 December 2000, Case No. 2 U 58/00, *JurPC—Internet Zeitschrift für Rechtsinformatik*, JurPC WebDok 255/2000 (available at www.jurpc.de/rechtspr/20000255.htm, accessed on 1 September 2003).

[26] Amtsgericht Hannover, 7 September 2002, Case No. 501 C 1510/01, *JurPC—Internet Zeitschrift für Rechtsinformatik*, JurPC WebDok 299/2002 (available at www.jurpc.de/rechtspr/20020299.htm, accessed on 1 September 2003).

[27] Bundesgerichtshof, 7 November 2001, Case No. VIII ZR 13/01, *JurPC—Internet Zeitschrift für Rechtsinformatik*, JurPC WebDok 255/2001 (available at www.jurpc.de/rechtspr/20010255.htm, accessed on 1 September 2003).

[28] The United Nations Sales Convention offers an implicit solution for the question in article 19, paragraph 2. Specific rules on the matter can be found in the UNIDROIT Principles of International Commercial Contracts (Unidroit, Rome, 1994).

[29] An overview of the differences between American and European law can be found in James R. Maxeiner, "Standard terms contracting in the global electronic age: European alternatives", *Yale Journal of International Law*, vol. 28, No. 1 (winter 2003), pp. 109-182.

[30] This has been one of the arguments put forward by the International Chamber of Commerce in its criticism of the corresponding provision in the preliminary draft convention (A/CN.9/WG.IV/WP.101, p. 6).

[31] *Bundesgesetz mit dem bestimmte rechtliche Aspekte des elektronischen Geschäfts- und Rechtsverkehrs geregelt (E-Commerce-Gesetz—ECG) und Änderung des Signaturgesetzes sowie der Zivilprozessordnung* (*Bundesgesetzblatt für die Republik Österreich*, 2001, p. 1977), sect. 26, para. 4.

[32] European Communities (Directive 2000/31/EC) Regulations 2003, regulation 7 (2).

[33] *Decreto legislativo 9 aprile 2003, n. 70*, art. 21, para. 1.

[34] *Ley 34/2002, de 11 de julio, de servicios de la sociedad de la información y de comercio electrónico*, arts. 38 and 39.

[35] *Bundesgesetz mit dem bestimmte rechtliche Aspekte des elektronischen Geschäfts- und Rechtsverkehrs geregelt (E-Commerce-Gesetz—ECG) und Änderung des Signaturgesetzes sowie der Zivilprozessordnung* (*Bundesgesetzblatt für die Republik Österreich*, 2001, p. 1977), sect. 26, para. 4.

[36] Electronic Commerce (EC Directive) Regulations 2002 (Statutory Instrument 2002 No. 2013), sect. 11 (2), regulation 13.

[37] Electronic Commerce (EC Directive) Regulations 2002 (Statutory Instrument 2002 No. 2013), sect. 11 (2), regulation 14.

[38] *Bürgerliches Gesetzbuch*, sect. 312e, para. 1, first sentence.

[39] German courts have decided, for example, that failure by a company to disclose its name and address, as required under the German Distance Sales Law (*Fernabsatzgesetz*), which is based largely on a directive of the European Commission, represented an act of unfair competition against which the violator's competitors could seek an injunction (Oberlandesgericht Frankfurt, Case No. 6 W 37/01, 17 April 2001, *JurPC—Internet Zeitschrift für Rechtsinformatik*, JurPC WebDok 135/2001 (www.jurpc.de/rechtspr/20010135.htm).