

1 DRAFT  
2 FOR DISCUSSION ONLY  
3 UNIFORM ELECTRONIC TRANSACTIONS ACT

4  
5  
6  
7 NATIONAL CONFERENCE OF COMMISSIONERS  
8 ON UNIFORM STATE LAWS  
9

---

10 Draft  
11 August 15, 1997  
12  
13 UNIFORM ELECTRONIC TRANSACTIONS ACT  
14  
15 With Notes  
16

17 COPYRIGHT 1997  
18 BY  
19 NATIONAL CONFERENCE OF COMMISSIONERS  
20 ON UNIFORM STATE LAWS

21  
22 The ideas and conclusions herein set forth, including drafts of  
23 proposed legislation, have not been passed on by the National  
24 Conference of Commissioners on Uniform State Laws. They do not  
25 necessarily reflect the views of the Committee, Reporter or  
26 Commissioners. Proposed statutory language, if any, may not be  
27 used to ascertain legislative meaning of any promulgated final  
28 law.

**DRAFTING COMMITTEE FOR  
UNIFORM ELECTRONIC TRANSACTIONS ACT**

PATRICIA BRUMFIELD FRY, University of North Dakota, School of  
Law, P.O. Box 9003, Grand Forks, ND 58202, Chair  
STEPHEN Y. CHOW, 30th Floor, One Beacon St., Boston, MA 02108  
KENNETH W. ELLIOTT, Suite 630, 119 N. Robinson, Oklahoma City, OK  
73102  
HENRY DEEB GABRIEL, JR., Loyola University, School of Law, 526  
Pine St., New Orleans, LA 70118  
RICHARD O. GREGERSON, 300 S. Phillips Ave., Suite 300, Sioux  
Falls, SD 57104-6322  
BION M. GREGORY, Office of Legislative Council, State Capitol,  
Suite 3021, Sacramento, CA 95814-4996  
PAMELA MEADE SARGENT, P.O. Box 429, Abingdon, VA 24212  
D. BENJAMIN BEARD, University of Idaho, College of Law, 6th and  
Rayburn, Moscow, ID 83844-2321, Reporter

**EX OFFICIO**

GENE N. LeBRUN, P.O. Box 8250, 9th Floor, 909 St. Joseph Street,  
Rapid City, SD 57709, President, National Conference  
HENRY M. KITTLESON, P.O. Box 32092, 92 Lake Wire Drive, Lakeland,  
FL 33802, Chair, Division A, National Conference

**EXECUTIVE DIRECTOR**

FRED H. MILLER, University of Oklahoma, College of Law, 300  
Timberdell Road, Norman, OK 73019, Executive Director  
WILLIAM J. PIERCE, 1505 Roxbury Road, Ann Arbor, MI 48104,  
Executive Director Emeritus.

Copies of this Act may be obtained from:

NATIONAL CONFERENCE OF COMMISSIONERS  
ON UNIFORM STATE LAWS  
676 St. Claire Street, Suite 1700  
Chicago, Illinois 60611  
312/915-0195

1                                   **UNIFORM ELECTRONIC TRANSACTIONS ACT**

2                                   **TABLE OF CONTENTS**

3                                   **PART 1**

4                                   **GENERAL PROVISIONS**

5       **SECTION 101. SHORT TITLE.**

6       **SECTION 102. DEFINITIONS.**

7       **SECTION 103. PURPOSES.**

8       **SECTION 104. SCOPE.**

9       **SECTION 105. TRANSACTIONS SUBJECT TO OTHER LAW.**

10      **SECTION 106. VARIATION BY AGREEMENT.**

11      **SECTION 107. APPLICABLE LAW.**

12      **SECTION 108. CHOICE OF FORUM.**

13      **SECTION 109. APPLICATION AND CONSTRUCTION.**

14      **SECTION 110. COURSE OF PERFORMANCE, COURSE OF DEALING, AND USAGE**  
15                                   **OF TRADE.**

16                                   **PART 2**

17                                   **ELECTRONIC RECORDS AND SIGNATURES GENERALLY**

18      **SECTION 201. LEGAL RECOGNITION OF ELECTRONIC RECORDS.**

19      **SECTION 202. WRITINGS.**

20      **SECTION 203. SIGNATURES.**

21      **SECTION 204. ELECTRONIC SIGNATURES EFFECT AND PROOF; SIGNATURE BY**  
22                                   **ELECTRONIC AGENTS.**

23      **SECTION 205. ORIGINALS - INFORMATION ACCURACY.**

1     **SECTION 206. ADMISSIBILITY INTO EVIDENCE.**

2     **SECTION 207. RETENTION OF ELECTRONIC RECORDS.**

3                             **PART 3**

4                     **SECURE ELECTRONIC RECORDS AND SIGNATURES**

5     **SECTION 301. SECURE ELECTRONIC RECORDS.**

6     **SECTION 302. SECURE ELECTRONIC SIGNATURES.**

7     **SECTION 303. PRESUMPTIONS.**

8                             **PART 4**

9                     **ELECTRONIC CONTRACTS AND COMMUNICATIONS**

10    **SECTION 401. EFFECTIVENESS BETWEEN PARTIES.**

11    **SECTION 402. FORMATION AND VALIDITY.**

12    **SECTION 403. ATTRIBUTION; TRANSMISSION ERRORS.**

13    **SECTION 404. TIME AND PLACE OF SENDING AND RECEIPT.**

14    **SECTION 405. ELECTRONIC ACKNOWLEDGMENT OF RECEIPT.**

15    **SECTION 406. TRANSFERABLE RECORDS.**

16                             **PART 5**

17                     **PUBLIC ELECTRONIC RECORDS**

18    **SECTION 501. USE OF ELECTRONIC RECORDS BY STATE AGENCIES.**

1  
2  
3  
4  
5

**PART 6**

**MISCELLANEOUS PROVISIONS**

**SECTION 601. SEVERABILITY.**

**SECTION 602. EFFECTIVE DATE.**

**SECTION 603. SAVINGS AND TRANSITIONAL PROVISIONS.**

1  
2  
3  
4  
5  
6  
7  
8  
9  
0  
1  
2  
3  
4  
5  
6  
7  
8  
9  
0  
1  
2  
3  
4

**SECTION 101. SHORT TITLE.** This [Act] may be cited as The Electronic Transactions Act.

(1) "Agreement" means the bargain of the parties in fact as found in their language or records or terms in records to which a party has manifested assent, or by implication from other circumstances including course of performance, course of dealing and usage of trade as provided in this [Act]. Whether an agreement has legal consequences is determined by this [Act], if applicable; otherwise by other applicable law.

**Reporter's Note:** The concept of agreement remains relevant in the context of commercial transactions addressed by this Act, particularly in the context of contract formation. However, in the electronic arena actions taken by an individual may not amount to a "bargain in fact" yet still indicate acceptance of terms or records. Accordingly, the concept of manifestation of assent has been added to the definition of agreement. The constructional priority of the various components which may go into determining the agreement of the parties is set forth in Section 109, while substantive rules regarding the determination of the actual terms of an agreement (e.g., the battle of the forms) is left to other law (e.g., Section 2-207, Restatement (Second) Contracts Sections 33, 204 and 211). See, Manifestation of Assent Section 102(16).

**Source:** Article 2B Draft Section 2B-102(a)(3).

**Reporter's Note:** This is a simplified definition derived from Article 2B. The definition sets forth the multi-purpose effect of what it means to authenticate a record without specifying the

1 manner in which one authenticates a record. The manner of  
2 authentication is found in the definition of signature and  
3 electronic signature, and is expanded in Section 204 regarding  
4 the effect of a signature.

5 At the May meeting the comment was made that authentication  
6 as defined in Article 2B and the prior models was circular in  
7 defining authentication as signing, and signing as  
8 authentication. Others questioned the need to define  
9 authenticate at all since it is not currently defined in the UCC  
10 and revised Article 5 determined not to define the term.

11 The definition of authenticate makes clear that when one  
12 "signs" a writing "with present intent to authenticate", the  
13 unstated assumption is that one intends to identify oneself as  
14 the signer, indicate agreement or adoption of the terms in the  
15 writing, and verify the integrity of the contents of that which  
16 is signed. Of course, the signer can indicate that only 1 or 2  
17 of these purposes was intended. However, this definition, and the  
18 provisions in Section 204, are intended to make clear the norm  
19 when one "signs" a record.

20 In this draft a recurring theme will be an attempt to  
21 demonstrate and establish the legal equivalence of electronic  
22 records and signatures with current understandings of writings  
23 and signatures in the paper environment. This approach is  
24 consistent with the premise that records and signatures should be  
25 effective regardless of the media in which they appear or are  
26 communicated.

27 Concern has been expressed that the use of the term  
28 authenticate in the rules of evidence may create confusion with  
29 the defined term in this Act and other commercial statutes such  
30 as Article 2B. Professor Leo Whinery, Reporter for the revision  
31 of the Uniform Rules of Evidence, advised me that the Evidence  
32 drafting committee has not yet addressed the issue of  
33 authentication. I have provided Professor Whinery with a copy of  
34 this draft, and will be working with him to resolve any conflicts  
35 or potential confusion. For the present, the Drafting Committee  
36 should consider whether an alternative term (e.g., confirm,  
37 validate) should be used in place of "authenticate" in this Act.

38 (3) "Automated transaction" means a transaction  
39 formed or performed, in whole or in part, by electronic records  
40 in which the records of one or both parties will not be reviewed  
41 by an individual as an expected step in forming a contract or  
42 performing under an existing contract.

43 **Source:** Article 2B Draft Section 2B-102(a)(18).

44 **Reporter's Note:** This is essentially the definition of  
45 "Electronic transaction" appearing in Article 2B. The term has  
46 been changed to "automated transaction" for clarity and to avoid

1 confusion in light of the title of this Act as the "Electronic  
2 Transactions Act."

3 As with electronic agents, this definition addresses the  
4 circumstance where electronic records may result in action or  
5 performance by a party although no human review of the electronic  
6 records is anticipated. Section 401(c) provides specific  
7 contract formation rules where one or both parties do not review  
8 the electronic records.

9  
10 (4) "Computer Program" means a set of statements or  
11 instructions to be used directly or indirectly to operate an  
12 information processing system in order to bring about a certain  
13 result. The term does not include any information created or  
14 communicated as a result of the operation of the system.

15 **Source:** Article 2B Draft Section 2B-102(a)(5).

16 **Reporter's Note:** This definition is from Article 2B. The term  
17 is used principally with respect to the definition of "electronic  
18 agent" and "information." Questions were raised at the May  
19 meeting regarding its necessity. Is it a necessary definition?  
20 Is it an accurate definition?

21 (5) "Conspicuous" means so displayed or presented that a  
22 reasonable individual against whom or whose principal it operates  
23 ought to have noticed it. A term is conspicuous if it is:

24 (A) a heading in all capitals (e.g., NON-NEGOTIABLE  
25 BILL OF LADING) equal or greater in size to the surrounding text;

26 (B) language in the body or text of a record or  
27 display in larger or other contrasting type or color than other  
28 language;

29 (C) a term prominently referenced in the body or  
30 text of an electronic record or display which can be readily  
31 accessed from the record or display;



1 (D) language so positioned in a record or display  
2 that a party cannot proceed without taking some additional action  
3 with respect to the term or the reference; or

4 (E) language readily distinguishable in another  
5 manner.

6 In the case of an electronic record intended to evoke a response  
7 without the need for review by an individual, a term is  
8 conspicuous if it is in a form that would enable a reasonably  
9 configured electronic agent to take it into account or react to  
10 it without review of the record by an individual

11 **Source:** Article 2B Draft Section 2B-102(a)(7).

12 **Reporter's Note:** This definition has been retained in the event  
13 the Drafting Committee determines the need for special consumer  
14 rules. The definition has been modified for clarity by placing  
15 the reference to electronic records which are not intended to be  
16 reviewed in a separate sentence at the end.

17 (6) "Consumer" means an individual who, at the time of  
18 entering into a transaction does so primarily for personal,  
19 family, or household purposes. [The term does not include a  
20 person that enters into a transaction primarily for profit  
21 making, professional, or commercial purposes, including  
22 agricultural, investments, research, and business and investment  
23 management, other than management of an ordinary person's  
24 personal or family assets.]

25 **Source:** Article 2B Draft Section 2B-102(a)(8).

26 **Reporter's Note:** This definition has been modified to eliminate  
27 the specific licensing context of Article 2B. It has also been  
28 broadened to cover any transaction entered into by a person in a  
29 consumer capacity. The bracketed language appears in Article 2B.  
30 Query whether it is necessary?

(7) "Contract" means the total legal obligation which results from the parties' agreement as affected by this [Act] as supplemented by other applicable rules of law.

**Source:** UCC Section 1-201(11).

(8) "Electronic" means electrical, digital, magnetic, optical, electromagnetic, or any other form of technology that includes capabilities similar to these technologies.

**Source:** Article 2B Draft Section 2B-102(15).

**Reporter's Note:** This definition serves to assure that the Act will be applied broadly as new technologies develop. While not all technologies listed a technically "electronic" in nature (e.g., optical fiber technology), the need for a recognized, single term warrants the use of "electronic" as the defined term. Query whether the definition is broad enough?

(9) "Electronic agent" means a computer program or other electronic or automated means used, selected, or programmed by a party to initiate or respond to electronic records or performances in whole or in part without review by an individual.

**Source:** Article 2B Draft Section 2B-102(a)(17).

**Reporter's Note:** An electronic agent, as a computer program or other automated device employed by a person, is a tool of that person. As a general rule, the employer of a tool is responsible for the results obtained in the use of that tool since the tool has no independent volition of its own. However, an electronic agent by definition is capable, within the parameters of its programing, of initiating, responding or interacting with other parties or their electronic agents once it has been activated by a party, without further attention of that party. This draft contains provisions dealing with the efficacy of, and responsibility for, actions taken and accomplished by electronic agents in the absence of human intervention.

While this Act proceeds on the paradigm that an electronic agent is capable of performing only within the technical strictures of its preset programing, it is conceivable that, within the useful life of this Act, electronic agents 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." Allen and Widdison, "Can Computers

1 Make Contracts?" 9 Harv. J.L.&Tech 25 (Winter, 1996). At such  
2 time as this may occur, "Courts may ultimately conclude that an  
3 electronic agent is equivalent in all respects to a human  
4 agent..." Article 2B-102, Reporter's Note 10.

5  
6 (10) "Electronic record" means a record stored,  
7 generated, received, or communicated by electronic means for use  
8 by, or storage in, an information system or for transmission from  
9 one information system to another.

10 **Source:** Article 2B Draft Section 2B-102(a)(17); Illinois Model  
11 Section 103(7).

12 **Reporter's Note:** An electronic record is a subset of the broader  
13 defined term "record." Unlike the term "electronic message" used  
14 in Article 2B, the definition is not limited to records intended  
15 for communication, but extends to any information contained in an  
16 electronic medium. It is also used in this Act as a limiting  
17 definition in those provisions in which it is used.

18  
19  
20 (11) "Electronic signature" means [letters, characters,  
21 numbers, or other] symbols in electronic form, attached to or  
22 logically associated with an electronic record, executed or  
23 adopted by a party with present intent to authenticate the  
24 electronic record.

25 **Source:** UCC Section 1-201(39); Illinois Model Section 103(8).

26 **Reporter's Note:** As with electronic record, this definition is a  
27 subset of the broader defined term "signature" which is  
28 substantially the definition set forth in UCC Section 1-201(39).  
29 The purpose of the separate definition is principally one of  
30 clarity in extending the definition of signature to the  
31 electronic environment. Query whether the bracketed language is  
32 necessary for clarity?

33 It would be possible to rely solely on the UCC definition  
34 which provides that a signature includes "any symbol executed or  
35 adopted by a party with present intention to authenticate a  
36 writing." However, as with the concept of authentication,  
37 certain assumptions attach to the extant definition. For  
38 example, it is assumed that the symbol adopted by a party is  
39 attached to or located somewhere in the same paper that is  
40 intended to be authenticated. These tangible manifestations do  
41 not exist in the electronic environment, and accordingly, this  
42 definition expressly provides that the symbol must in some way be  
43 linked to, or associated with, the electronic record being

1 authenticated. This linkage is consistent with the regulations  
2 promulgated by the Food and Drug Administration. 21 CFR Part 11  
3 (March 20, 1997).

4 An electronic signature includes any symbol adopted by a  
5 party, so long as the requisite intent to authenticate the  
6 electronic record is present. Accordingly a digital signature  
7 utilizing public key encryption technology would qualify, as  
8 would the mere appellation of one's name at the end of an e-mail  
9 message - so long as in each case the party applied the symbol  
10 with the intention to authenticate the electronic record with  
11 which it was associated. It is the adoption of the symbol with  
12 intention to authenticate that is controlling. See *Parma Tile*  
13 *Mosaic & Marble Co. v. Estate of Short*, 87 NY2d 524 (1996) where  
14 it was held that the automatic imprint of a firm name, programmed  
15 into a fax machine, was not a sufficient signature because of the  
16 absence of any intention to authenticate each document sent over  
17 the fax.  
18

19 (12) "Good faith" means honesty in fact and the  
20 observance of reasonable commercial standards of fair dealing.

21 **Source:** Article 2B Draft Section 2B-102(a)(20).

22 (13) "Information" means data, text, images, sounds,  
23 codes, computer programs, software, databases, and the like.

24 **Source:** Article 2B Draft Section 2B-102(a)(22); Illinois Model  
25 Section 103(10).

26 (14) "Information system" means a system for generating,  
27 sending, receiving, storing or otherwise processing information,  
28 including electronic records.

29 **Source:** Uncitral Model Article 2(f).

30 **Reporter's Note:** This term is used in the definition of  
31 electronic record and in Section 404 regarding the time and place  
32 of receipt of an electronic record. Query the accuracy and  
33 completeness of this definition?

34 (15) "Manifest of Assent" means that a party or its  
35 electronic agent has signed or otherwise clearly indicated that a  
36 record or term in a record has been adopted or accepted by the  
37 party or its electronic agent. A party or its electronic agent

1 manifests assent by engaging in affirmative conduct or operations  
2 with actual knowledge of the terms or after having an opportunity  
3 to review the terms, and with the opportunity to decline to sign  
4 or engage in the conduct. A manifestation of assent to a record  
5 or term in a record does not result merely by retention of the  
6 record or term without objection by the party or its electronic  
7 agent. If assent to a particular term in addition to assent to a  
8 record is required, action taken by a party or its electronic  
9 agent does not manifest assent to that term unless there was an  
10 opportunity to review the term and the action taken relates  
11 specifically to that term.

12 **Source:** Article 2B Draft Section 2B-112(a-c).

13 **Reporter's Note:** Derived from Article 2B, this term, together  
14 with the term "opportunity to review," is critical in determining  
15 what constitutes the agreement of parties when that agreement is  
16 formed electronically. Because of the nature of electronic  
17 media, it may well be the case that a party does not deal with a  
18 human being on the other side of a transaction.

19 In an electronic environment where computers are often pre-  
20 programmed and operate without human review of the operations in  
21 any particular, discreet transaction, it is not always the case  
22 that two humans have reached a "bargain in fact," i.e., a  
23 "meeting of the minds." Rather, the agreement is often the  
24 result of one party or its electronic agent manifesting assent to  
25 terms or records presented to it on a "take it or leave it (i.e.,  
26 exit)" basis, similar to the presentation of a standard form  
27 document in the paper environment.

28 The situations where parties participate in detailed  
29 negotiations leading to the formation of an integrated contract  
30 setting forth all the terms to which both parties have agreed are  
31 largely limited to transactions involving large amounts. Even  
32 outside the electronic environment, the use of pre-printed  
33 standard forms has supplanted detailed negotiations in many small  
34 amount transactions. Accordingly the concept of manifestation of  
35 assent to a record or terms of a record has supplemented the  
36 notion of actual agreement in determining that to which the  
37 parties have agreed to be bound (See Restatement (Second)  
38 Contracts Section 211, UCC Section 2-207).

39 Even in an electronic environment it remains possible to  
40 negotiate to agreement. In such a case, if parties engage in e-  
41 mail correspondence which results in a classic offer and

1 acceptance of the terms (and only the terms) set forth in the  
2 correspondence, the electronic signatures appended to the e-mail  
3 messages serve to authenticate the records and result in contract  
4 formation. This is the case since an electronic signature, by  
5 definition, is made with intent to authenticate the record.

6 Contrasted with such a negotiated electronic contract is the  
7 situation where one calls up a provider on the Internet. The  
8 person determines to purchase the goods or services offered and  
9 is walked through a series of displayed buttons requesting the  
10 purchaser to agree to certain terms and conditions in order to  
11 obtain the goods and services. With each click on screen, the  
12 purchaser is indicating assent to that term in order to obtain  
13 the desired results. So long as the action of clicking in each  
14 case relates to a discreet term, or follows the full presentation  
15 of all terms, the actions of the purchaser can be said to clearly  
16 indicate assent to the terms available for review. As with the  
17 exchange of standard paper forms, there is no requirement that  
18 the terms be read before the on screen click occurs, so long as  
19 they were available to be read. Indeed, in such a scenario the  
20 problem of additional and conflicting terms which have so  
21 confused courts in the battle of the forms is not present.

22 Accordingly, the concept of manifesting assent has been  
23 included in the term "agreement" in this Act.  
24

25 (16) "Merchant" means a person that is a professional in  
26 the business involved in the transaction, that by occupation  
27 purports to have knowledge or skill peculiar to the practices  
28 involved in the transaction, or to which knowledge or skill may  
29 be attributed by the person's employment of an agent or broker or  
30 other intermediary that purports to have the knowledge or skill.

31 **Source:** Article 2B Draft Section 2B-102(a)(30).

32 **Reporter's Note:** This definition has been modified to eliminate  
33 the specific licensing context of Article 2B. It has been  
34 retained in this draft in the event particular consumer rules are  
35 ultimately included.

36 (17) "Notify" means to communicate, or make available,  
37 information to another person in a form and manner as appropriate  
38 or required under the circumstances.

39 **Source:** Illinois Model Section 103(22).

40 **Reporter's Note:** As with the definition of receive, a notice sent  
41 to a party must be in a proper format to permit the recipient to  
42 use and understand the information. For example, sending a

1 message notice to a recipient in the United States in Chinese  
2 would not suffice to notify the recipient of the content of the  
3 message, in the absence of proof that the recipient understood  
4 Chinese. Similarly, sending a notice in WordPerfect 7.0 may not  
5 be appropriate when many people do not have the capability to  
6 convert from that format. In such a case, a more universal  
7 format such as ASCII would be required.

8 (18) "Opportunity to Review" means that a record or a  
9 term of a record is made available in a manner designed to call  
10 it to the attention of the party and to permit review of its  
11 terms or to enable an electronic agent to react to the record or  
12 term.

13 **Source:** Article 2B Draft Section 2B-113(a).

14 **Reporter's Note:** See Reporter's Note to Manifest Assent, supra.

15 (19) "Organization" means a person other than an  
16 individual.

17 **Source:** UCC Section 1-201(28).

18 **Reporter's Note:** This is the standard Conference formulation for  
19 this definition.

20 (20) "Person" means an individual, corporation, business  
21 trust, estate, trust, partnership, limited liability company,  
22 association, joint venture, [government, governmental  
23 subdivision, agency or instrumentality,] or any other legal or  
24 commercial entity.

25 **Source:** UCC Section 1-201(30).

26 **Reporter's Note:** This is the standard Conference formulation for  
27 this definition.

28 (21) "Receive," with respect to an electronic record,  
29 means that the electronic record has entered an information  
30 system in a form capable of being processed by a system of that

1 type and the recipient uses or has designated that system for the  
2 purpose of receiving such records or information.

3 **Source:** Article 2B Draft Section 2B-102(a)(34).

4 **Reporter's Note:** This definition only addresses receipt of  
5 electronic records. Receipt in this context requires both that  
6 the record be sent to a designated or known system of the  
7 recipient, and that the record be in a format which can be  
8 processed by that system. The burden of assuring the form is  
9 processable by the receiving system is on the sender. See  
10 comment to Notify.

11 (22) "Record" means information that is inscribed on a  
12 tangible medium or that is stored in an electronic or other  
13 medium and is retrievable in perceivable form.

14 **Source:** Article 2B Draft Section 2B-102(a)(35).

15 **Reporter's Note:** This is the standard Conference formulation for  
16 this definition.

17 (23) "Rule of law" means a statute, regulation,  
18 ordinance, common-law rule, court decision, or other law relating  
19 to commercial or governmental transactions enacted, established,  
20 or promulgated by this State , or any agency, commission,  
21 department, court, other authority or political subdivision of  
22 this State.

23 **Source:** Oklahoma Model Section II.F; Illinois Model Section  
24 103(19).

25 **Reporter's Note:** The definition is drafted broadly with the  
26 single limitation of laws relating to commercial and governmental  
27 transactions, consistent with the Scope of the Act.

28 (24) "Security procedure," with respect to either an  
29 electronic record or electronic signature, means a commercially  
30 reasonable procedure or methodology, established by agreement,  
31 mutually adopted by the parties, or otherwise established to be a  
32 commercially reasonable procedure, for verifying (i) the identity  
33 of the sender, or source, of an electronic record, or (ii) the



1 integrity of, or detecting errors in, the transmission or  
2 informational content of an electronic record. A security  
3 procedure may require the use of algorithms or other codes,  
4 identifying words or numbers, encryption, callback or other  
5 acknowledgment procedures, key escrow, or any other procedures  
6 that are reasonable under the circumstances.

7 **Source:** UCC Section 4A-201; Article 2B Draft Section 2B-110(a);  
8 Illinois Model Section 103(21); Oklahoma Model Section III.B.2.

9 **Reporter's Note:** This is a new definition derived from the  
10 sources indicated. The two key aspects of the procedure are to  
11 identify the sender and assure the informational integrity of the  
12 record. The definition does not identify any particular  
13 technology but relies on the concept of commercial  
14 reasonableness. This permits the use of procedures which the  
15 parties select or which otherwise are appropriate in light of all  
16 the surrounding circumstances relating to a given transaction.  
17 It permits the greatest flexibility among the parties and allows  
18 for future technological development.

19 (25) "Signature" includes any symbol executed or adopted  
20 by a person with a present intent to authenticate a record.

21 **Source:** UCC Section 1-201(39).

22 **Reporter's Note:** This definition reflects the current UCC  
23 definition. As noted, the definition of electronic signature is  
24 a subset of this definition.

25 (26) "State agency" means any executive, legislative or  
26 judicial agency, department, board, commission, authority,  
27 institution, or instrumentality of this State or of any county,  
28 municipal or other political subdivision of this State.

29 **Source:** New.

30 **Reporter's Note:** This definition is required as a result of the  
31 expanded scope of the Act to cover governmental transactions.  
32

33 (27) "Transferable record" means a record, other than a  
34 writing, that is an instrument or chattel paper under Article 9

1 of the [Uniform Commercial Code] or a document of title under  
2 Article 1 of the [Uniform Commercial Code].

3 **Source:** Oklahoma Model Section II.H.

4 **Reporter's Note:** This definition is necessary in the event the  
5 Drafting Committee decides to retain the applicability of this  
6 Act to such records. See Section 406.

7 (28) "Writing" includes printing, typewriting, or any  
8 other reduction to tangible form. "Written" has a corresponding  
9 meaning.

10 **Source:** UCC Section 1-201(46).

11 **Reporter's Note:** This definition reflects the current UCC  
12 definition.

13 **SECTION 103. PURPOSES.** The underlying purposes of this Act  
14 are

15 a) to facilitate and promote commerce and governmental  
16 transactions by validating and authorizing the use of electronic  
17 records and electronic signatures;

18 b) to eliminate barriers to electronic commerce and  
19 governmental transactions resulting from uncertainties relating  
20 to writing and signature requirements;

21 c) to simplify, clarify and modernize the law governing  
22 commerce and governmental transactions through the use of  
23 electronic means;

24 d) to permit the continued expansion of commercial and  
25 governmental electronic practices through custom, usage and  
26 agreement of the parties;

27 e) to promote uniformity of the law among the states (and  
28 worldwide) relating to the use of electronic and similar

1 technological means of effecting and performing commercial and  
2 governmental transactions;

3 f) to promote public confidence in the validity,  
4 integrity and reliability of electronic commerce and governmental  
5 transactions; and

6 g) to promote the development of the legal and business  
7 infrastructure necessary to implement electronic commerce and  
8 governmental transactions.

9 **Sources:** Illinois Model Section 102; UCC Section 1-102(2).

10 **Reporter's Note:** This section is compiled from purposes set  
11 forth in the sources. It is intended to direct Courts in  
12 construing the Act to permit flexibility in addressing new  
13 technologies as they arise.

14 Despite an admonition from members of the Style Committee  
15 that purpose clauses are to be avoided because they cause  
16 mischief by creating uncertainty as to the substantive provisions  
17 of the Act, this section has been retained in light of the  
18 Drafting Committee's sense that it is appropriate for this Act.  
19 The purposes can be relegated to comment if the Drafting  
20 Committee believes that is more appropriate.  
21

22 **SECTION 104. SCOPE.** Except as otherwise provided in Section  
23 105, this Act applies to records generated, stored, processed,  
24 communicated or used for any purpose in any commercial or  
25 governmental transaction.

26 **Source:** New.

27 **Reporter's Note:** The purpose of this Act is to validate and  
28 effectuate electronic records and electronic signatures used in  
29 any commercial or governmental transaction. The idea of a  
30 commercial transaction is to be broadly understood. In a  
31 footnote, the Uncitral Model Law provides that

32 The term "commercial" should be given a wide interpretation  
33 so as to cover matters arising from all relationships of a  
34 commercial nature, whether contractual or not. Relationships  
35 of a commercial nature include, but are not limited to, the  
36 following transactions: any trade transaction for the supply  
37 or exchange of goods or services; distribution agreement;  
38 commercial representation or agency; factoring; leasing;

1 construction of works; consulting; engineering; licensing;  
2 investment; financing; banking; insurance; exploitation  
3 agreement or concession; joint venture and other forms of  
4 industrial or business cooperation; carriage of goods or  
5 passengers by air, sea, rail or road.

6 At the May meeting the Drafting Committee expressed strong  
7 reservations about applying this Act to all writings and  
8 signatures, as is contemplated in the Illinois, Massachusetts and  
9 other models. The requirement of a global search and replace in  
10 state legislation was considered too burdensome and was believed  
11 would jeopardize the ability to obtain broad (never mind uniform)  
12 enactment of this Act. Nonetheless there was sentiment among the  
13 observers for just such a broad, all encompassing Act. This  
14 draft adopts a compromise position consistent with the Uncitral  
15 Model Law.

16 Consistent with the expanded scope of the Act approved by the  
17 Scope and Program Committee this summer, the scope has been  
18 expanded to cover governmental transactions. Since the  
19 circumstances under which any given State may wish, or be able to  
20 adopt electronic means of conducting its business, this Act  
21 simply provides authority for state entities to adopt the means  
22 to go electronic. Part 5 authorizes state entities to adopt  
23 rules and regulations to implement electronic transactions.

24 Query for the Drafting Committee: Is it sufficient to leave  
25 the scope of commercial transactions and governmental  
26 transactions to commentary, or should the Act set forth specific  
27 definitions for these terms?

28 Section 105 sets forth a preliminary list of transactions  
29 which would not be covered by this Act. Furthermore, the  
30 specific provisions relating to writings and signatures include  
31 subsections identifying areas which would not be affected by  
32 those provisions.

### 33 **SECTION 105. TRANSACTIONS SUBJECT TO OTHER LAW.**

34 (a) [Unless otherwise expressly agreed by the parties,] This  
35 [Act] does not apply to the extent that a transaction is governed  
36 by:

37 (1) rules of law relating to the creation or execution of  
38 a will;

39 (2) rules of law relating to the transfer, deposit or  
40 withdrawal of money or financial credit;

1 (3) rules of law relating to the creation, performance or  
2 enforcement of an indenture, declaration of trust or power of  
3 attorney;

4 (4) rules of law relating to the conveyancing of real  
5 property;

6 (5) [OTHER]

7 (b) A transaction subject to this [Act] is also subject to:

8 (1) any applicable rules of law relating to consumer  
9 protection;

10 (2) [OTHER].

11 (c) In the case of a conflict between this [Act] and a rule  
12 of law referenced in subsection (b), such rule of law governs.

13 **Source:** Article 2 Draft Section 2-104 (July 1997 Draft); Oklahoma  
14 Model Sections III.B and IV.D.

15 **Reporter's Note:** Subsection (a) lists those transactions which  
16 are excluded from the operation of this Act. Query whether  
17 parties should be able to opt into the Act? What other  
18 transactions should be totally excluded? Should there be a  
19 provision, as in the Oklahoma Model, which excludes

20 any rule of law which expressly prohibits the use of a record  
21 other than a writing to convey information....The mere  
22 requirement in a rule of law that such information be "in  
23 writing" shall not be sufficient to satisfy the requirement  
24 of an express prohibition.

25 The Oklahoma Bankers Model includes a similar exclusion relating  
26 to signatures. The question is whether such exclusions can be  
27 left to the states to adopt by amendment to existing legislation,  
28 considering that existing legislation would not be more specific  
29 than requiring transactions to be "in writing," and therefore  
30 would not be covered by the exclusion in any event.

31 Subsections (b) and (c) take a less exclusionary approach.  
32 They simply highlight those transactions (for now limited to  
33 consumer transactions) where conflicts are to be resolved in  
34 favor of the other source of law.

35 **SECTION 106. VARIATION BY AGREEMENT.** (a) As between parties  
36 involved in generating, storing, sending, receiving, or otherwise

1 processing or using electronic records or electronic signatures,  
2 and except as otherwise provided, the provisions of this [Act]  
3 may be varied by agreement.

4 (b) The presence in certain provisions of this [Act]  
5 of the words "unless otherwise agreed" or words of similar import  
6 does not imply that the effect of other provisions may not be  
7 varied by agreement under subsection (a).

8 (c) This [Act] does not, nor shall it be construed  
9 to, require that information or signatures be created, stored,  
10 transmitted, or otherwise used or communicated by electronic  
11 means or in electronic form.

12 **Source:** UCC Section 1-102; Illinois Model Section 104.

13 **Reporter's Note:** Given the principal purpose of this Act to  
14 validate and effectuate the use of electronic media in commercial  
15 and governmental transactions, it is important to preserve the  
16 ability of the parties to establish their own requirements  
17 concerning the method of generating, storing and communicating  
18 with each other. This Act affects substantive rules of contract  
19 law in only limited ways (See especially Part 4). Even in those  
20 cases, the parties remain free to alter the timing and effect of  
21 their communications.

## 22 **SECTION 107. APPLICABLE LAW.**

23 (a) An agreement by parties to a transaction governed in  
24 whole or in part by this [Act] that their rights and obligations  
25 with respect are to be determined by the law of this state or  
26 another state or country is effective, whether or not the  
27 transaction bears a reasonable relation to that state or country,  
28 unless:

29 (1) the transaction is a consumer transaction and  
30 that state or country is neither

1 (A) the state or country in which the consumer  
2 resides at the time the transaction becomes enforceable or will  
3 reside within 30 days thereafter, nor

4 (B) the state or country in which, pursuant to the  
5 contract establishing the transaction, the goods, services, or  
6 other consideration flowing to the consumer are to be received by  
7 the consumer or a person designated by the consumer;

8 (2) the law of that state or country is contrary to a  
9 fundamental public policy of the state or country whose law would  
10 govern if the parties had not selected the governing law by  
11 agreement; or

12 (3) the agreement of the parties selects the law of a  
13 country other than the United States and the transaction does not  
14 bear a reasonable relationship to a country other than the United  
15 States.

16 SUBSECTION (B) ALTERNATIVE 1

17 (b) If subsection (a) does not apply or the agreement of  
18 the parties under subsection (a) is ineffective, this [Act]  
19 applies to transactions bearing an appropriate relation to this  
20 state.

21 SUBSECTION (B) ALTERNATIVE 2

22 (b) If subsection (a) does not apply or the agreement of  
23 the parties under subsection (a) is ineffective, the law  
24 determining the rights and obligations of parties with respect to  
25 any aspect of a transaction governed by this [Act] is the law  
26 that would ordinarily be selected by application of this state's

1 conflict of laws principles[; provided, however, that if  
2 application of such principles to a transaction that is not a  
3 consumer transaction would result in the unenforceability of all  
4 or part of an agreement that is enforceable under the law of this  
5 state, the law governing those rights and obligations is the law  
6 of this state unless the transaction does not bear an appropriate  
7 relationship to this state].

8 **Source:** Article 1 Draft Section 1-302; UCC Section 1-105(1).

9 **Reporter's Note:** Subsection (a) gives wide flexibility to the  
10 parties in choosing the law applicable to their transaction. The  
11 only limits placed on party autonomy in this regard relate to 1)  
12 consumer transactions, 2) where the choice would result in the  
13 violation of a fundamental public policy of the forum state, and  
14 3) in the international context, where the law of a country with  
15 no reasonable relation to the transaction is selected.

16 Alternative 1 Subsection (b) adopts the so-called "imperial  
17 clause" found in the last sentence of current UCC Section 1-  
18 105(1). The intention of including such a clause in this Act is  
19 similar to the purpose of originally adopting the clause in the  
20 UCC - to encourage broad, uniform enactment of this Act. In  
21 addition, such a clause would give greater protection to  
22 transactions conducted electronically.

23 Alternative 2 Subsection (b) sets forth the proposed revision  
24 of Article 1. The April draft proposes a conflict of laws rule,  
25 i.e., the applicable law is that designated by the State's  
26 conflict of law rules. The bracketed language provides an  
27 exception where the law which would otherwise be chosen would  
28 invalidate the transaction which would not be invalid under the  
29 law of the state applying its conflict of laws rules.

30 **SECTION 108. CHOICE OF FORUM.** The parties may choose an  
31 exclusive judicial forum. However, in a consumer contract the  
32 choice is not enforceable if the chosen jurisdiction would not  
33 otherwise have jurisdiction over the consumer, the consumer did  
34 not have adequate notice of the choice of forum term and the  
35 choice [is fundamentally unfair to] and [unreasonably burdens]  
36 the consumer. A choice of forum in a term of an agreement is not  
37 exclusive unless the agreement expressly so provides.



1 **Uniform Law Source:** Article 2B Draft Section 2B-107.

2 **Reporter's Note:** The following Notes are from the Article 2B  
3 Reporter's Note to that section.

4 **Selected Issue:**

5 a. Should the choice of forum be validated in Internet  
6 transactions, independent of the consumer or other issue  
7 under the rationale in Cruise Lines?

8 **Reporter's Notes:**

9 1. This section deals with choice of an exclusive judicial  
10 forum. It does not cover contract terms that **permit** litigation  
11 to be brought in a designated jurisdiction, but do not require  
12 that result. Although earlier case law viewed forum choices  
13 with some disfavor, the trend of modern case law enforces  
14 choice of forum clauses, even if in standard form contracts, so  
15 long as enforcement does not unreasonably disadvantage a party.  
16 Since 1972, courts have shown an increasing willingness to  
17 enforce this type of contract provision, subject to due process  
18 restrictions. See *Bremen v. Zapata Offshore Co.*, 407 U.S. 1,  
19 10 (1972) (choice of forum clauses are "prima facie valid").  
20 This case law does not differentiate between standard form and  
21 nonstandard contracts. See *Carnival Cruise Lines, Inc. v.*  
22 *Shute*, 111 S.Ct. 1522 (1991). However, constitutional concerns  
23 about fairness and notice may provide a limiting role. Thus,  
24 the US Supreme Court held that a choice of arbitration under  
25 New York law in a standard form contract could not be enforced  
26 to apply New York law prohibiting punitive damage awards in  
27 arbitration where that substantive effect was not highlighted  
28 or brought to the affected party's attention. Similarly, some  
29 courts hold such clauses to be unenforceable where they impinge  
30 on concepts of fundamental unfairness. See also *Perkins v. CCH*  
31 *Computax, Inc.*, 106 N.C. App. 210, 415 S.E.2d 755 (1992);  
32 *Lauro Lines v. Chasser*, 490 U.S. 495 (1989); *Sterling Forest*  
33 *Assocs., Ltd. v. Barnett-Range Corp.*, 840 F.2d 249 (4th Cir.  
34 1988).

35 2. The importance of choice of forum provisions in  
36 transactions in modern cyberspace was highlighted by a series  
37 of cases involving jurisdictional issues on Internet and  
38 related online environments. See, e.g., *CompuServe v.*  
39 *Patterson*, 89 F.3d 927 (6<sup>th</sup> Cir. 1996). (allowing jurisdiction  
40 of Texas provider in Ohio because of contract contacts with  
41 Ohio online provider). The Supreme Court enforced a choice of  
42 forum in a standard form contract even though the choice  
43 effectively denied a consumer the ability to defend the  
44 contract and the choice was contained in a non-negotiated form  
45 and not presented to the consumer until after the tickets had  
46 been purchased. See *Carnival Cruise Lines, Inc. v. Shute*, 111  
47 S.Ct. 1522 (1991). [Language in the syllabus of the decision  
48 has] relevance to Internet contracting....:

49 [I]t would be entirely unreasonable to assume that a  
50 cruise passenger would or could negotiate the terms of  
51 a forum clause in a routine commercial cruise ticket

1 form. Nevertheless, including a reasonable forum  
2 clause in such a form well may be permissible for  
3 several reasons. Because it is not unlikely that a  
4 mishap in a cruise could subject a cruise line to  
5 litigation in several different fora, the line has a  
6 special interest in limiting such fora. Moreover, a  
7 clause establishing ex ante the ... forum has the  
8 salutary effect of dispelling confusion as to where  
9 suits may be brought.... Furthermore, it is likely that  
10 passengers purchasing tickets containing a forum clause  
11 ... benefit in the form of reduced fares reflecting the  
12 savings that the cruise line enjoys....  
13 End of Article 2B Reporter's Note.

14 Recognizing the prima facie validity of forum selection clauses  
15 following Bremen, this section approves forum selection clauses  
16 generally, with separate protections in the consumer context. The  
17 protections are based on common sense (if the forum would otherwise  
18 have jurisdiction, the forum clause is irrelevant), and  
19 considerations outlined in Carnival Cruise Lines and subsequent  
20 cases (adequate notice and fundamental fairness). In Carnival  
21 Cruise Lines the Supreme Court was concerned with bad faith and  
22 overreaching by the party imposing the clause and the possibility  
23 that a party might be effectively denied an opportunity to litigate  
24 a meritorious claim. It is to be noted that in Carnival Cruise  
25 Lines the Supreme Court concluded that the party against whom the  
26 clause operated had not satisfied the "heavy burden of proof"  
27 necessary to set aside the clause on the ground of inconvenience.

28 The standards of fundamental unfairness and unreasonable burden  
29 are different formulations of essentially the same concerns  
30 expressed by the courts. These concerns relate to (1) fraud, undue  
31 influence and overwhelming bargaining power, (2) whether a selected  
32 forum is so inconvenient as to deprive a party of its day in court  
33 and (3) whether enforcement of the clause would violate a strong  
34 public policy of the forum in which suit is brought. See Bonny v.  
35 Society of Lloyd's, 3 F.3d 156 (7th Cir., 1993).  
36  
37

38 **SECTION 109. APPLICATION AND CONSTRUCTION.** This [Act] must be  
39 liberally construed and applied consistently with commercially  
40 reasonable practices under the circumstances and to promote its  
41 underlying purposes and policies.

42 **Source:** UCC Section 1-102.

1           **SECTION 110.   COURSE OF PERFORMANCE, COURSE OF DEALING, AND**  
2           **USAGE OF TRADE.**

3           (a)   A "course of performance" is a sequence of conduct  
4           between the parties to a particular transaction that exists if:

5                   (1)   the agreement of the parties with respect to the  
6           transaction involves repeated occasions for performance by a  
7           party;

8                   (2)   that party performs on one or more occasions; and

9                   (3)   the other party, with knowledge of the nature of  
10          the performance and opportunity for objection to it, accepts the  
11          performance or acquiesces to it without objection.

12          (b)   A "course of dealing" is a sequence of previous conduct  
13          between the parties to a particular transaction that is fairly to  
14          be regarded as establishing a common basis of understanding for  
15          interpreting their expressions and other conduct.

16          (c)   A "usage of trade" is any practice or method of dealing  
17          having such regularity of observance in a place, vocation or trade  
18          as to justify an expectation that it will be observed with respect  
19          to the transaction in question. The existence and scope of such a  
20          usage are to be proved as facts. If it is established that such a  
21          usage is embodied in a trade code or similar record the  
22          interpretation of the record is a question of law.

23          (d)   A course of performance or course of dealing between  
24          the parties or usage of trade in the vocation or trade in which  
25          they are engaged or of which they are or should be aware is  
26          relevant in ascertaining the meaning of the parties' agreement, may

1 give particular meaning to specific terms of the agreement, and may  
2 supplement or qualify the terms of the agreement. A usage of trade  
3 applicable where only part of the performance under the agreement  
4 is to occur may be so utilized as to that part of the performance.

5 (e) The express terms of an agreement, terms with respect  
6 to which a party has manifested assent, and any applicable course  
7 of performance, course of dealing or usage of trade shall be  
8 construed wherever reasonable as consistent with each other. If  
9 such a construction is unreasonable:

10 (1) express terms prevail over terms with respect to  
11 which either party has manifested assent, course of performance,  
12 course of dealing, and usage of trade;

13 (2) terms with respect to which either party has  
14 manifested assent prevail over course of performance, course of  
15 dealing, and usage of trade;

16 (3) course of performance prevails over course of  
17 dealing and usage of trade; and

18 (4) course of dealing prevails over usage of trade.

19 (f) Evidence of a relevant usage of trade offered by one  
20 party is not admissible unless that party has given the other party  
21 such notice as the court finds sufficient to prevent unfair  
22 surprise to the latter.

23 **Source:** Article 1 Draft Section 1-304.

24 **Reporter's Note:** This section follows the existing priority of  
25 construction found in UCC Sections 1-205 and 2-208. In addition,  
26 the priority to be given terms with respect to which either party  
27 has manifested assent has been added.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7

## ELECTRONIC RECORDS AND SIGNATURES GENERALLY

**SECTION 201. LEGAL RECOGNITION OF ELECTRONIC RECORDS.** A

record may not be denied legal effect, validity or enforceability solely because it is in the form of an electronic record.

**Source:** Uncitral Model Article 5; Illinois Model Section 201.

**Reporter's Note:** This section establishes the fundamental premise of this Act: That the form in which a record is generated, presented, communicated or stored may not be the only reason to deny the record legal recognition. On the other hand, section 201 should not be interpreted as establishing the legal effectiveness, validity or enforceability of any given record. Where a rule of law requires that the record contain minimum substantive content, the legal effect, validity or enforceability will depend on whether the record meets the substantive requirements. However, the fact that the information is set forth in an electronic, as opposed to paper record, is irrelevant.

## SECTION 202. WRITINGS.

(a) Except as provided in subsection (b), if a rule of law requires a record to be in writing, or provides consequences if it is not, an electronic record satisfies that rule of law.

(b) This section does not apply to: \_\_\_\_\_.

**Source:** Oklahoma Model Section III; Uncitral Model Article 6; Illinois Model Section 202.

**Reporter's Note:** This section, like sections 203, 205 and 207, is a particularized application of Section 201. Its purpose is to validate and effectuate electronic records as the equivalent of writings, subject to all of the rules applicable to the efficacy of a writing, except as such other rules are modified by the more specific provisions of this Act.

Illustration 1: A sends the following e-mail to B: "I hereby offer to buy 100 widgets for \$1000, delivery next Tuesday. /s/ A" B responds with the following e-mail: " I accept your offer to purchase 100 widgets for \$1000, delivery next Tuesday. /s/ B" The e-mails of each party qualify as records, and the records otherwise satisfy the requirements of UCC Section 2-201(1). The

transaction may not be denied legal effect solely because there is not a pen and ink "writing."

Illustration 2: A sends the following e-mail to B: "I hereby offer to buy widgets from you, delivery next Tuesday. /s/ A" B responds with the following e-mail: "I accept your offer to buy widgets for delivery next Tuesday. /s/ B" Though the e-mails qualify as records, there is no quantity stated in either record, and the parties' agreement would be unenforceable under existing Section 2-201(1).

The purpose of the Section is to validate electronic records in the face of legal requirements for paper writings. Where no legal requirement of a writing is implicated, electronic records are subject to the same proof issues as any other evidence.

**SECTION 203. SIGNATURES.** (a) If a rule of law requires a

signature, or provides consequences in the absence of a signature, that rule of law is satisfied with respect to an electronic record if the electronic record includes an electronic signature.

(b) A party may establish reasonable requirements regarding the method and type of signatures which will be acceptable to it.

(c) The provisions of this article do not apply to:

**Source:** Uncitral Model Article 7; Illinois Model Section 203; Oklahoma Model Section IV.

**Reporter's Note:** This section, consistent with the existing UCC definition of a signature as "any symbol executed or adopted by a party with present intention to authenticate a writing," merely reiterates for clarity the rule that an electronic record containing an electronic signature satisfies legal requirements. The critical issue in either the signature or electronic signature context is what the signer intended when the symbol was executed, attached or incorporated into the record.

This section is technology neutral - it neither adopts nor prohibits any particular form of electronic signature. However, it only validates electronic signatures for purposes of applicable legal signing requirements and does not address the legal sufficiency, reliability or authenticity of any particular signature. As in the paper world, questions of the signer's intention and authority, as well as questions of fraud, are left to other law. The effect and proof of electronic signatures is addressed in the next Section.

1 Subsection (b) preserves the right of a party to establish  
2 reasonable requirements for the method and type of signatures  
3 which will be acceptable. Accordingly, and consistent with  
4 Section 106(c), a party may refuse to accept any electronic  
5 signature and of course establish the method and type of  
6 electronic signature which is acceptable.

7 Finally, the section leaves open the possibility that  
8 particular transactions should be excluded from the operation of  
9 this particular provision, although such transactions have not  
10 been excluded from the general applicability of this Act under  
11 section 105.

12 **SECTION 204. ELECTRONIC SIGNATURES EFFECT AND PROOF;**  
13 **SIGNATURES BY ELECTRONIC AGENTS.**

14 (a) Unless the circumstances otherwise indicate that a party  
15 intends less than all of the effect, an electronic signature is  
16 intended to establish the signing party's identity, its adoption  
17 and acceptance of a record or a term, and the authenticity of the  
18 record or term.

19 (b) Operations of an electronic agent constitute the  
20 electronic signature of a party if the party designed, programed,  
21 or selected the electronic agent for the purpose of achieving  
22 results of that type.

23 (c) [An electronic record is signed as a matter of law if  
24 the party complied with a security procedure. Otherwise,] An  
25 electronic signature may be proved in any manner sufficient to  
26 demonstrate

27 (1) the signer's intention to authenticate the electronic  
28 record, or term thereof, to which the electronic signature is  
29 attached or relates, including by showing that a procedure  
30 existed by which a party must of necessity have executed a

1 symbol, or manifested assent, in order to proceed further in the  
2 processing of the transaction, or

3 (2) that the party is bound by virtue of the operations  
4 of its electronic agent.

5 (d) The authenticity of, and authority to make, an electronic  
6 signature is admitted unless specifically denied in the  
7 pleadings. If the validity of an electronic signature is denied  
8 in the pleadings, the burden of establishing validity is on the  
9 person claiming validity.

10 [(e) If a rule of law requires that a signature be notarized  
11 or acknowledged for the electronic record to be enforceable or  
12 filed of record, that requirement shall be deemed satisfied with  
13 respect to an electronic record which has not been notarized if  
14 (I) the electronic record includes a secure electronic signature,  
15 or (ii) the creation, transmission and storage of the electronic  
16 record itself, or the symbol or methodology adopted for signing  
17 such electronic record, provide substantial evidence of the  
18 identity of the person signing the electronic record. Whether  
19 the substantial evidence standard has been met is for decision by  
20 the court.]

21 **Source:** Article 2B Draft Section 2B-114; UCC Section 3-308;  
22 Illinois Model Section 203.

23 **Reporter's Note:** An electronic signature is any symbol or  
24 methodology adopted with present intent to authenticate a  
25 writing. This Act includes a definition of authenticate in order  
26 to make clear what a signer intends by authenticating a document,  
27 i.e., to identify oneself, adopt the terms of the signed record,  
28 and verify the integrity of the informational content of the  
29 record which is signed. By identifying the multi-purpose effect  
30 of authenticating a record, this Act clarifies the assumption as  
31 to the intent of one signing any writing. Subsection (a) simply  
32 applies this assumption to the electronic signature. As with a



1 signature on paper, the signing party remains free to prove that  
2 the signing was intended to accomplish only 1 or 2 of the normal  
3 purposes associated with a signing.

4 Subsection (b) extends signing to the electronic agent,  
5 automated context. Its purpose is to establish that by  
6 programing an electronic agent, a party assumes responsibility  
7 for electronic records and operations "executed" by the program.  
8 While the electronic agent may or may not execute a symbol  
9 representing an electronic signature (i.e., with present intent  
10 to authenticate the electronic record), the party programing the  
11 electronic agent has indicated its authentication of records and  
12 operations produced by the electronic agent within the parameters  
13 set by the programing. Accordingly, the party should be bound  
14 and deemed to have signed (authenticated) the records of the  
15 electronic agent.

16 Subsection (c) provides that an electronic signature may be  
17 proved by any evidence establishing the signer's intention to  
18 authenticate, or that the party is bound by the operations of its  
19 electronic agent under Subsection (b). It also makes clear that  
20 proof of an electronic signature may be made by showing that a  
21 process existed which had to be followed to obtain the results  
22 achieved. This addresses the increasingly common "point and  
23 click" processes in on-line and on-screen programs. An issue for  
24 the Drafting Committee relates to the bracketed language  
25 providing that a record is signed as a matter of law if a  
26 security procedure was followed. A related issue arises in Part  
27 3, Section 303 regarding the propriety of presumptions where  
28 secure electronic records and signatures are involved. This  
29 Section is limited to the issue of whether factual questions  
30 regarding whether the signature occurred (separate from the issue  
31 of the effect, validity or authenticity of the signature) should  
32 be foreclosed if a security procedure is followed.

33 Subsection (d) borrows from Article 3 in raising the  
34 procedural requirements for denying the validity of a signature.  
35 Unless the validity of an electronic signature is specifically  
36 denied in the pleadings, the authenticity of and authority to  
37 make the signature are admitted. However, if the validity of the  
38 signature is put in issue by an express denial, the party  
39 asserting validity must carry the burden of so establishing. In  
40 the event that the Drafting Committee adopts presumptions  
41 regarding the validity of secure electronic signatures, the party  
42 asserting validity would be aided by such a presumption in the  
43 face of an express denial.

44 Although there was concern raised by the Drafting Committee  
45 regarding the propriety of addressing notarial requirements in  
46 this Act, the bracketed subsection (e) has been retained for  
47 further discussion, if desired.

48 **SECTION 205. ORIGINALS - INFORMATION ACCURACY.** (a) If a  
49 rule of law [or a commercial practice] requires a record to be

1 presented or retained in its original form, or provides  
2 consequences for the record not being presented or retained in  
3 its original form, that requirement is met by an electronic  
4 record if [the electronic record is shown to reflect accurately]  
5 [there exists a reliable assurance as to the integrity of] the  
6 information set forth in the electronic record from the time when  
7 it was first generated in its final form, as an electronic record  
8 or otherwise.

9 (b) The criteria for assessing the integrity and accuracy of  
10 the information in an electronic record shall be determined by  
11 whether the information has remained complete and unaltered,  
12 apart from the addition of any endorsement and any change which  
13 arises in the normal course of communication, storage and  
14 display. The standard of reliability required shall be assessed  
15 in the light of the purpose for which the information was  
16 generated and in the light of all the relevant circumstances.

17 (c) The provisions of this article do not apply to the  
18 following:\_\_\_\_\_.

19 **Source:** Uncitral Model Article 8; Illinois Model Section 204.

20 **Reporter's Note:** This section deals with the serviceability of  
21 electronic records as originals. As was noted at the May  
22 meeting, the concept of an original electronic document is  
23 problematic. For example, as I draft this Act the question may  
24 be asked what is the "original" draft. My answer would be that  
25 the "original" is either on a disc or my hard drive to which the  
26 document has been initially saved. Since I periodically save the  
27 draft as I am working, the fact is that at times I save first to  
28 disc then to hard drive, and at others vice versa. In such a  
29 case the "original" may change from the information on my disc to  
30 the information on my hard drive. Indeed, as I understand  
31 computer operations, it may be argued that the "original" exists  
32 solely in RAM and, in a sense, the original is destroyed when a  
33 "copy" is saved to a disc or to the hard drive. In any event, the  
34 concern focuses on the integrity of the information, and not with

1 its "originality." Given the recognition of this problem, the  
2 title of the section has been expanded to reflect the concern  
3 regarding the informational integrity of an electronic record;  
4 integrity which is assumed to exist in the case of an original  
5 writing.

6 A second question raised at the May meeting related to when  
7 the law requires an "original." Except in the context of paper  
8 tokens such as documents of title and negotiable instruments,  
9 most requirements for "originals" derive from commercial practice  
10 where the assurance of informational integrity is a concern. The  
11 comment to Illinois Model Law Section 204 (derived largely from  
12 Uncitral Model Law Summary Paragraph 62) identifies some of these  
13 situations as follows:

14 The requirement that a document be "an original" occurs in a  
15 variety of contexts for a variety of reasons. Documents of  
16 title and negotiable instruments, for example, typically  
17 require the endorsement and presentation of an original. But  
18 in many other situations it is essential that documents be  
19 transmitted unchanged (i.e., in their "original" form), so  
20 that other parties, such as in international commerce, may  
21 have confidence in their contents. Examples of such  
22 documents that might require an "original" are trade  
23 documents such as weight certificates, agricultural  
24 certificates, quality/quantity certificates, inspection  
25 reports, insurance certificates, etc. Other non-business  
26 related documents which also typically require an original  
27 form include birth certificates and death certificates. When  
28 these documents exist on paper, they are usually only  
29 accepted if they are "original" to lessen the chance that  
30 they have been altered, which would be difficult to detect in  
31 copies.

32 Since requirements for "originals" are often the result of  
33 commercial practice and not an actual rule of law, the section  
34 includes the bracketed language regarding requirements derived  
35 from commercial practice. As a policy matter it is not at all  
36 clear that legislation should override established commercial  
37 practice. This is a question which must be resolved by the  
38 drafting committee.

39 So long as there exists reliable assurance that the  
40 electronic record accurately reproduces the information, this  
41 section continues the theme of establishing the functional  
42 equivalence of electronic and paper-based records. This is  
43 consistent with Fed.R.Evid. 1001(3) and Unif.R.Evid. 1001(3)  
44 (1974) which provide:

45 If data are stored in a computer or similar device, any  
46 printout or other output readable by sight, shown to reflect  
47 the data accurately, is an "original."

1 The bracketed alternatives for testing the reliability of the  
2 informational content of an electronic record are provided for  
3 the Drafting Committee's consideration. At the May meeting  
4 concern was expressed that the "reasonable assurance" standard  
5 was too vague. The first alternative tracks the language in the  
6 rules of evidence and focuses on the accuracy of the information  
7 presented.

8 Another issue relates to the use of originals for evidentiary  
9 purposes. In this context the concern principally relates to the  
10 "best evidence" or "original document" rule. The use of  
11 electronic records in evidence is addressed in the next section  
12 and its notes.

13 **SECTION 206. ADMISSIBILITY INTO EVIDENCE.** (a) In any legal

14 proceeding, nothing in the application of the rules of evidence  
15 shall apply so as to deny the admissibility of an electronic  
16 record or electronic signature into evidence:

17 (1) on the sole ground that it is an electronic record  
18 or electronic signature; or

19 (2) on the grounds that it is not in its original form  
20 or is not an original.

21 (b) Admissible information in the form of an electronic  
22 record or electronic signature shall be given evidential weight  
23 by the trier of fact. In assessing the evidential weight of an  
24 electronic record or electronic signature, the trier of fact  
25 shall consider the manner in which the electronic record or  
26 electronic signature was generated, stored, communicated, or  
27 retrieved, the reliability of the manner in which the integrity  
28 of the electronic record or electronic signature was maintained,  
29 the manner in which its originator was identified or the  
30 electronic record was signed, and any other relevant information  
31 or circumstances.

32 **Source:** Uncitral Model Article 9; Illinois Model Section 205.

1 **Reporter's Note:** Like sections 202 and 203, subsection (a)(1)  
2 prevents the nonrecognition of electronic records solely on the  
3 ground of the media in which information is presented. Subsection  
4 (a)(2) also precludes inadmissibility on the ground an electronic  
5 record is not an original. This section may be deleted in light  
6 of the provisions of section 205 and the rules of evidence.

7 Nothing in this section relieves a party from establishing  
8 the necessary foundation for the admission of an electronic  
9 record. Subsection (b) gives guidance to the trier of fact in  
10 according weight to otherwise admissible electronic evidence.

11 **SECTION 207. RETENTION OF ELECTRONIC RECORDS.** (a) If a

12 rule of law requires that certain documents, records, or  
13 information be retained, that requirement is met by retaining  
14 electronic records, provided that the following conditions are  
15 satisfied:

16 (1) the information contained in the electronic record  
17 remains accessible so as to be usable for subsequent reference;  
18 and

19 (2) the electronic record is retained in the format in  
20 which it was generated, stored, sent or received, or in a format  
21 which can be demonstrated to reflect accurately the information  
22 as originally generated, stored, sent or received; and

23 (3) such information, if any, is retained as enables the  
24 identification of the source of origin and destination of an  
25 electronic record and the date and time when it was sent or  
26 received.

27 (b) A requirement to retain documents, records or  
28 information in accordance with subsection (a) does not extend to  
29 any information the sole purpose of which is to enable the record  
30 to be sent or received.

1 (c) A person may satisfy the requirement referred to in  
2 subsection (a) by using the services of any other person,  
3 provided that the conditions set forth in paragraphs (1), (2),  
4 and (3) of subsection (a) are met.

5 (d) The provisions of this section do not apply to  
6 documents, records, or information excluded from the provisions  
7 of Section 202 (Writings) or Section 203 (Signatures).

8 (e) Nothing in this section shall preclude any Federal or  
9 state agency from specifying additional requirements for the  
10 retention of records, either written or electronic, that are  
11 subject to the jurisdiction of such agency.

12 **Source:** Uncitral Model Article 10; Illinois Model Section 206.

13 **Reporter's Note:** At the May meeting concern was expressed that  
14 retained records may become unavailable because the storage  
15 technology becomes obsolete and incapable of reproducing the  
16 information on the electronic record. Subsection (a)(1)  
17 addresses this concern by requiring that the information in the  
18 electronic record "remain" accessible, and subsection (a)(2)  
19 addresses the need to assure the integrity of the information  
20 when the format is updated or changed.

21 This section would permit parties to convert original written  
22 records to electronic records for retention so long as the  
23 requirements of subsection (a) are satisfied. Accordingly, in the  
24 absence of specific requirements to retain written records,  
25 written records may be destroyed once saved as electronic records  
26 satisfying the requirements of this section.  
27

## 28 PART 3 29

### 30 SECURE ELECTRONIC RECORDS AND SIGNATURES

31 **SECTION 301. SECURE ELECTRONIC RECORDS.** If, through the  
32 application of a security procedure, it can be verified that an  
33 electronic record has remained unaltered since a specified time,  
34 the record is a secure electronic record from that time forward.

1 **Source:** Illinois Model Section 301.

2 **Reporter's Note:** See Reporter's Note following section 303.

3       **SECTION 302. SECURE ELECTRONIC SIGNATURES.** If, through the  
4 application of a security procedure, it can be verified that an  
5 electronic signature was, at the time it was made, unique to the  
6 person using it, capable of verification, under the sole control  
7 of the person using it, and linked to the electronic record to  
8 which it relates in a manner such that if the record was changed  
9 the electronic signature would be invalidated, the signature is a  
10 secure electronic signature.

11 **Source:** Illinois Model Section 302.

12 **Reporter's Note:** See Reporter's Note following section 303.

13 This section has been revised to clarify that the requirements  
14 for determining an electronic signature's status as a secure  
15 electronic signature must exist at the time the signature is  
16 made. This avoids the possibility that a party would divulge the  
17 security procedure to another party after the fact in order to  
18 avoid operation of the presumptions raised in section 303.

19       **SECTION 303. PRESUMPTIONS.**

20       (a) With respect to a secure electronic record, there is a  
21 rebuttable presumption that the electronic record has not been  
22 altered since the specific time to which the secure status  
23 relates.

24       (b) With respect to a secure electronic signature there is a  
25 rebuttable presumption that;

26               (1) the secure electronic signature is the signature of  
27 the party to whom it relates; and

28               (2) the secure electronic signature was affixed by that  
29 party with the intention of signing the record.

1 (c) In the absence of a secure electronic record or a secure  
2 electronic signature, this [Act] does not create any presumption  
3 regarding the authenticity and integrity of an electronic record  
4 or an electronic signature.

5 **Source:** Illinois Model Section 303.

6 **Reporter's Note:** Part 3 raises the fundamental issue for the  
7 Drafting Committee of whether to create any presumptions favoring  
8 secure records and signatures, and if so, what level of  
9 specificity is necessary to create secure records and signatures  
10 before the presumptions will apply. Professor Whinery has  
11 indicated that the question of whether or not to create a  
12 presumption is a matter of policy to be decided by this Drafting  
13 Committee. The Rules of Evidence address the effect of a  
14 presumption and the level of evidence necessary to overcome a  
15 presumption. However the question of whether a fact should be  
16 entitled to the benefits of a presumption under appropriate  
17 circumstances is a question of policy relating to the substantive  
18 law. He cited the example of the presumption of legitimacy  
19 accorded a child born during wedlock.

20 Professor Whinery indicated that the current draft of Rule  
21 301(a) follows existing Rule 301(a) by reallocating the burden of  
22 persuasion to the party against whom the presumption operates.  
23 This approach is contrasted with the so-called "bursting bubble  
24 approach which simply shifts the burden of producing evidence to  
25 the party against whom the presumption operates. McCormick  
26 contends that regardless of the strength accorded a presumption  
27 under the various rules of evidence, the differing levels of  
28 significance underlying various presumptions results in the  
29 courts treatment of presumptions in different ways. Accordingly,  
30 a secondary issue for the drafting committee relates to the  
31 strength and effect of any presumption given to secure electronic  
32 records and signatures, i.e., would such a presumption shift the  
33 burden of proof or only the burden of persuasion.

34 An alternative approach may be through procedural rules such  
35 as appear in Section 204(d) (specific denial of the signature in  
36 the pleadings required), and the operation of the attribution  
37 rules in section 403. If the guiding premise of this Act is to  
38 establish the legal equivalence of writings/electronic records  
39 and signatures/electronic signatures, it may be inappropriate to  
40 accord even secure electronic records and signatures greater  
41 weight than handwritten writings and signatures.  
42



1 **PART 4**

2 **ELECTRONIC CONTRACTS AND COMMUNICATIONS**

3 **SECTION 401. EFFECTIVENESS BETWEEN PARTIES.** (a) Except as  
4 otherwise provided in subsection (b), as between the sender and  
5 the recipient of an electronic record, a communication or other  
6 statement may not be denied legal effect, validity, or  
7 enforceability solely on the grounds that it is in the form of an  
8 electronic record.

9 (b) This section does not apply to [. . . ].

10 **Source:** Uncitral Model Article 12.

11 **Reporter's Note:** This section relates specifically to  
12 communications and notices sent as part of a transaction and,  
13 again, makes clear that the effectiveness of records and  
14 communications may not be denied effect solely on the ground that  
15 electronic means were used. Of course, this provision is subject  
16 to the parties general ability to alter the terms of this Act by  
17 agreement, e.g., by requiring that notices, etc. be made or given  
18 in writing.

19 **SECTION 402. FORMATION AND VALIDITY.** (a) Unless otherwise  
20 agreed, an offer and the acceptance of an offer may be expressed  
21 by means of electronic records. If an electronic record is used  
22 in the formation of a contract, the contract may not be denied  
23 validity or enforceability on the sole ground that an electronic  
24 record was used for that purpose.

25 (b) Subject to subsection (c), operations of one or more  
26 electronic agents which confirm the existence of a contract are  
27 effective to form a contract even if no individual representing  
28 either party was aware of or reviewed the action or its results.

29 (c) In an automated transaction, the following rules  
30 apply:

1           (1) A contract is formed by the interaction of two  
2 electronic agents if the interaction results in each agent  
3 engaging in operations that signify agreement, such as by  
4 engaging in performing the contract, ordering or instructing  
5 performance, accepting performance, or making a record of the  
6 existence of a contract.

7           (2) A contract may be formed by the interaction of  
8 an electronic agent and an individual. A contract is formed if  
9 an individual has reason to know that the individual is dealing  
10 with an electronic agent and performs actions the person should  
11 know will cause the electronic agent to perform or to permit  
12 further use, or that are clearly indicated as constituting  
13 acceptance regardless of other contemporaneous expressions by the  
14 individual to which the electronic agent cannot react.

15           (3) The terms of a contract resulting from an  
16 automated transaction include terms of the parties' agreement,  
17 terms which the electronic agent could take into account, and, to  
18 the extent not covered by the foregoing, terms provided by law.

19           (d) If an electronic record initiated by a party or an  
20 electronic agent evokes an electronic record in response and the  
21 records reflect an intent to be bound, a contract exists when:

22               (1) the response signifying acceptance is received; or

23               (2) if the response consists of electronically performing  
24 the requested consideration in whole or in part, when the  
25 requested consideration, to be performed electronically, is

received, unless the originating record prohibited that form of response.

**Source:** Article 2B Draft Sections 2B-203(e & f) and 2B-204(a); Uncitral Model Article 11.

**Reporter's Note:** Subsection (a) makes clear that offer and acceptance in the context of contract formation may be accomplished by electronic means.

Subsections (b) and (c) are taken from Article 2B's provisions regarding contract formation in electronic transactions, i.e. those transactions not involving human review by one or both parties. Subsection (b) provides a rule to expressly validate a fully automated transaction. Subsection (c) sets forth the circumstances which demonstrate the formation of a contract under a fully automated transaction and under an automated transaction where one party is an individual.

Finally, subsection (d) deals with timing in the formation of a contract by electronic means. Subsection (d)(2) makes clear that acceptance by performance, either in whole or in part, when the performance is electronic, occurs on receipt. When acceptance of an offer by performance occurs other than electronically (e.g. by the shipment of product), acceptance is governed by other rules of law such as the UCC and common law. As to timing of receipt see section 404.

#### **SECTION 403. ATTRIBUTION; TRANSMISSION ERRORS.** (a) As

between the parties, an electronic record received by a party is attributable to the party indicated as the sender if:

(1) it was sent by that party, its agent, or electronic agent;

(2) the receiving party, in good faith and in compliance with a security procedure concluded that it was sent by the other party; or

(3) subject to subsection (b), the electronic record:

(A) resulted from acts of a person that obtained access to a security procedure, access numbers, codes, computer programs, or the like from a source under the control of the

1 alleged sender creating the appearance that the electronic record  
2 came from the alleged sender;

3 (B) the access occurred under circumstances  
4 constituting a failure to exercise reasonable care by the alleged  
5 sender; and

6 (c) the receiving party reasonably relied to its  
7 detriment on the apparent source of the electronic record.

8 (b) In a case governed by subsection (a)(3), the following  
9 rules apply:

10 (1) The receiving party has the burden of proving  
11 reasonable reliance, and the alleged sender has the burden of  
12 proving reasonable care.

13 (2) Reliance on an electronic record that does not  
14 comply with an agreed security procedure is not reasonable unless  
15 authorized by an individual representing the alleged sender.

16 (c) If an electronic record was transmitted pursuant to a  
17 security procedure for the detection of error and the record  
18 contained an error the following rules apply:

19 (1) If the sender complied with the security procedure  
20 and the error would have been detected had the receiving party  
21 also complied with the security procedure, the sender is not  
22 bound.

23 (2) If the sender, pursuant to a security procedure,  
24 receives a notice of the content of the record as received, the  
25 sender has a duty to review the notice and report any error  
26 detected by it, in a commercially reasonable manner.

(d) Except as otherwise provided in subsection (a)(1) and (c), if a loss occurs because a party complies with a security procedure that was not commercially reasonable, the party that required use of the commercially unreasonable security procedure bears the loss unless it disclosed the nature of the risk to the other party or offered commercially reasonable alternatives that the party rejected. The party's liability under this section is limited to losses that could not have been prevented by the exercise of reasonable care by the other party.

**Source:** Article 2B Draft Section 2B-111.

**Reporter's Note:** This section follows Article 2B and sets forth risk allocation rules in the context of record attribution and content error. The section sets forth rules establishing the circumstances under which a party will be bound by (be attributable for) an electronic record sent to another party, and when a party may be bound by an error in an electronic record.

Subsection (a)(1) relies on general agency law, including the new concept of electronic agency, to bind the sender. Subsections (a)(2) and (3) deal with allocations of risk where security procedures are involved. Under subsection (a)(2) an electronic record will be attributed to the sender if the recipient complied, in good faith, with a security procedure which confirmed the source of the electronic record. Subsection (a)(3) binds the purported sender of an electronic record where the sender's negligence in maintaining security procedures or the like has permitted the record to be sent and the recipient reasonably relied on the record to its detriment.

Similarly, subsection (c) allocates the risk of errors in transmission to the party that could have best detected the error through the use of a security procedure.

Through the application of loss allocation rules relating to the implementation of security procedures, this section may provide an alternative to the creation of presumptions in section 303, as a means of giving heightened protection to secure electronic transactions.

#### **SECTION 404. TIME AND PLACE OF SENDING AND RECEIPT. (a)**

Unless otherwise agreed between the sender and the recipient, an electronic record is sent when it enters an information system

1 outside the control of the sender or of a person who sent the  
2 electronic record on behalf of the sender.

3 (b) Unless otherwise agreed between the sender and the  
4 recipient, the time of receipt of an electronic record is  
5 determined as follows:

6 (1) if the recipient has designated a specific  
7 information system for the purpose of receiving electronic  
8 records, receipt occurs:

9 (A) at the time when the electronic record enters  
10 the designated information system; or

11 (B) if the electronic record is sent to an  
12 information system of the addressee that is not the designated  
13 information system, at the time when the electronic record is  
14 retrieved by the recipient;

15 (2) if the recipient has not designated a specific  
16 information system, receipt occurs when the electronic record  
17 enters an information system of the recipient.

18 (c) Subsection (b) applies notwithstanding that the place  
19 where the information system is located may be different from the  
20 place where the electronic record is considered to be received  
21 under subsection (d).

22 (d) Unless otherwise agreed between the sender and the  
23 recipient, an electronic record is considered to be sent from the  
24 place where the sender has its place of business, and is  
25 considered to be received at the place where the recipient has  
26 its place of business. For the purposes of this subsection:

1           (1) if the sender or the recipient has more than one  
2 place of business, the place of business is that which has the  
3 closest relationship to the underlying transaction or, if there  
4 is no underlying transaction, the principal place of business;

5           (2) if the sender or the recipient does not have a place  
6 of business, reference is to be made to its habitual residence.

7           (e) Subject to section 405, an electronic record is effective  
8 when received, even if no individual is aware of its receipt.

9           (f) The provisions of this section do not apply to the  
10 following; [. . .].

11 **Source:** Article 2B Draft Section 2B-204(b); Uncitral Model  
12 Article 15.

13 **Reporter's Note:** This section provides default rules regarding  
14 when and where an electronic record is received. As with  
15 acknowledgments of receipt under section 405, this section does  
16 not address the efficacy of the record that is received. That  
17 is, whether a record is unintelligible or unusable by a recipient  
18 is a separate issue from whether that record was received.

19           In the case of a sender which has designated a specific  
20 information system, receipt of a record is keyed to entry into  
21 that information system. Where the sender has designated a  
22 particular system for receipt, it is reasonable to assume that  
23 the record, once it has entered that information system is  
24 available to the recipient. If a specific system is designated  
25 but the record is sent to a system other than the designated  
26 system, receipt occurs only on retrieval of the record by the  
27 recipient, since immediate availability to the recipient cannot  
28 be assumed. Where no system has been designated by the sender  
29 receipt occurs upon entry into any system of the recipient.

30           Subsections (b) and (c) provide default rules for determining  
31 where a record will be considered to have been received. The  
32 focus is on the place of business of the recipient and not the  
33 physical location of the information system. As noted in  
34 paragraph 100 of the commentary to the Uncitral Model Law,

35           It is not uncommon for users of electronic commerce to  
36 communicate from one State to another without knowing the  
37 location of information systems through which communication  
38 is operated. In addition, the location of certain  
39 communication systems may change without either of the  
40 parties being aware of the change.

41 Accordingly, where the place of sending or receipt is an issue,  
42 the relevant location should be the location of the sender or

1 recipient and not the location of the information system.

2  
3 Subsection (b) rejects the mailbox rule and provides that  
4 electronic records are effective on receipt. This approach is  
5 consistent with Article 4A and, as to electronic records, Article  
6 2B.

7 **SECTION 405. ELECTRONIC ACKNOWLEDGMENT OF RECEIPT.**

8 (a) If the sender of a record requests or agrees with the  
9 recipient of the record that receipt of the record must be  
10 acknowledged electronically, the following rules apply:

11 (1) If the sender indicates in the record or otherwise  
12 that the record is conditional on receipt of an electronic  
13 acknowledgment, the record does not bind the sender until  
14 acknowledgment is received and lapses if acknowledgment is not  
15 received in a reasonable time.

16 (2) If the sender requests electronic acknowledgment but  
17 does not state that the record is conditional on electronic  
18 acknowledgment, does not specify a time for receipt and  
19 electronic acknowledgment is not received within an reasonable  
20 time after the record is sent, on notice to the other party, the  
21 sender may either revoke the record or specify a further  
22 reasonable time within which electronic acknowledgment must be  
23 received or the message will be treated as not having binding  
24 effect. If electronic acknowledgment is not received within that  
25 additional time, the sender may treat the record as not having  
26 binding effect.

27 (3) If the sender requests electronic acknowledgment  
28 and specifies a time for receipt, if receipt does not occur



1 within that time the sender may [treat the record as not having  
2 binding effect] [exercise the options in subsection (2)] .

3 (b) Receipt of electronic acknowledgment establishes that  
4 the record was received but, in itself, does not establish that  
5 the content sent corresponds to the content received.

6 **Source:** Article 2B Draft Section 2B-205; Uncitral Model Article  
7 14.

8 **Reporter's Note:** This section deals with functional  
9 acknowledgments as described in the ABA Model Trading Partner  
10 Agreement. The purpose of such functional acknowledgments is to  
11 confirm receipt, and not necessarily to result in legal  
12 consequences flowing from the acknowledgment.

13 Subsection (a) permits the sender of a record to be the  
14 master of its communication by requesting or requiring  
15 acknowledgment of receipt. The subsection then sets out default  
16 rules for the effect of the original message under different  
17 circumstances. Article 2B Section 205(a)(3) permits the sender  
18 of a record who has requested acknowledgment by a specified time,  
19 if the acknowledgment is not timely received, to either revoke  
20 the record or specify a further period for acknowledgment, upon  
21 notice to the recipient under subsection (2). This draft has an  
22 alternate provision which permits the sender to treat the record  
23 as lapsing without further action.

24 As noted in subsection (b) the only effect of a functional  
25 acknowledgment is to establish receipt. The acknowledgment alone  
26 does not affect questions regarding the binding effect of the  
27 acknowledgment nor the content, accuracy, time of receipt or  
28 other issues regarding the legal efficacy of the record or  
29 acknowledgment.

30 **SECTION 406. TRANSFERABLE RECORDS.** If the identity of the  
31 rightful holder of a transferable record can be reliably  
32 determined from the record itself or from a method employed for  
33 recording, registering, or otherwise evidencing the transfer of  
34 interests in such records, the rightful holder of the record is  
35 considered to be in possession of the record, and any  
36 indorsements required by applicable rules of law to effect  
37 transfer to the rightful holder are considered to have been  
38 given.

1 **Source:** Oklahoma Model Section III.B.2.

2 **Reporter's Note:** This section has been retained for discussion  
3 by the Drafting Committee on whether such documents should be  
4 covered by this Act.

5 **PART 5**

6 **PUBLIC ELECTRONIC RECORDS**

7 **Section 501. USE OF ELECTRONIC RECORDS BY STATE AGENCIES.**

8 (a) [Except where expressly prohibited by statute,] Every  
9 state agency, through the adoption of appropriate regulations,  
10 may create and retain electronic records in lieu of written  
11 records and may also convert written records to electronic  
12 records. [Rules governing the disposition of written records  
13 after conversion to electronic records shall be established by  
14 the secretary of state.]

15 (b) Any state agency that accepts the filing of records, or  
16 requires that records be created or retained by any person, may  
17 authorize, through the adoption of appropriate regulations, the  
18 filing, creation or retention of records in the form of  
19 electronic records [except where expressly prohibited by  
20 statute].

21 (c) In any case governed by subsection (a) or (b), the state  
22 agency, by appropriate regulation giving due consideration to  
23 security, [may] [shall] specify:

24 (1) the manner and format in which the electronic records  
25 must be filed, created or retained;

26 (2) where electronic records must be electronically  
27 signed, the type of electronic signature required (including, if

1 applicable, requiring the use of a secure electronic signature),  
2 and the manner and format in which the electronic signature must  
3 be affixed to the electronic record;

4 (3) control processes and procedures as appropriate to  
5 ensure adequate integrity, security, confidentiality, and  
6 auditability of electronic records; and

7 (4) any other required attributes for electronic records  
8 that are currently specified for corresponding non-electronic  
9 records.

10 (d) Nothing in this [Act] shall be construed to require any  
11 state agency to use or permit the use of electronic records or  
12 signatures.

13 **Source:** Illinois Model Section 1001; Massachusetts Electronic  
14 Records and Signatures Act Section 3 (Draft - April 17, 1997);  
15 Florida Electronic Signature Act, Chapter 96-324, Section 7  
16 (1996).

17 **Reporter's Note:** This section is new and addresses the expanded  
18 scope of this Act.

19 Subsection (a) authorizes state agencies to use electronic  
20 records generally for intra-governmental purposes. It is  
21 permissive and not obligatory (see Subsection (d)). It also  
22 authorizes the destruction of written records after conversion to  
23 electronic form. In this regard, the bracketed language requires  
24 the secretary of state to issue regulations governing such  
25 conversions. Should this regulatory function reside in the  
26 secretary of state or be left to the affected state agency under  
27 subsection (c)?

28 Subsection (b) authorizes state agencies to accept filings  
29 and permit the creation and retention of electronic records in  
30 lieu of written records for statutory and regulatory purposes  
31 related to private persons. Again, the provision is permissive  
32 and not obligatory (see subsection (d)).

33 Subsection (c) authorizes state agencies to establish  
34 regulations governing the quality of the electronic records and  
35 signatures which will be acceptable. The question here is  
36 whether the state agencies should be required, or merely  
37 permitted, to promulgate such regulations before accepting  
38 electronic records? Should the task of promulgating regulations  
39 be left with the secretary of state or other central authority?

1 Finally, subsection (d) makes clear that nothing in this Act  
2 requires any state agency to accept or use electronic records.

3 **PART 6**  
4 **MISCELLANEOUS PROVISIONS**

5 **SECTION 601. SEVERABILITY.** If a provision of this [Act], or  
6 an application thereof to any person or circumstance, is held  
7 invalid, the invalidity does not affect other provisions or  
8 applications of the [Act] that can be given effect without the  
9 invalid provision or application, and to this end the provisions  
10 of this [Act] are severable.

11 **Source:** Article 1 Draft Section 1-106.

12 **SECTION 602. EFFECTIVE DATE.**

13 **Source:**

14 **SECTION 603. SAVINGS AND TRANSITIONAL PROVISIONS.**

15 **Source:**