

DRAFT  
FOR DISCUSSION ONLY

# UNIFORM ELECTRONIC TRANSACTIONS ACT

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NATIONAL CONFERENCE OF COMMISSIONERS  
ON UNIFORM STATE LAWS

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NOVEMBER 25, 1997

# UNIFORM ELECTRONIC TRANSACTIONS ACT

With Comments

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NATIONAL CONFERENCE OF COMMISSIONERS  
ON UNIFORM STATE LAWS

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## UNIFORM ELECTRONIC TRANSACTIONS ACT

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**SECTION 101. SHORT TITLE.** This [Act] may be cited as The the Uniform 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~~ inferred 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, or, otherwise by other applicable rules of law.

**Reporter's Note:** At the September Meeting the definition of agreement which included terms to which a party manifested assent was rejected. The consensus of both the Committee and observers was that there was no need to separate manifestations of assent from the language and circumstances which comprise the bargain in fact of the parties as part of the definition of agreement. Rather the Reporter was directed to return to the definition of agreement in the Uniform Commercial Code. Accordingly, the current definition is taken from the most recent revision to Article 1.

**Reporter's Note:** Based on the comments and direction of the Drafting Committee at the September meeting, this section has been deleted and its substance incorporated into the definition of signature.

1                   (3 ~~2~~) "Automated transaction" means a commercial  
2                   or governmental transaction formed or performed, in whole or  
3                   in part, by electronic records in which the records of one  
4                   or both parties will not be reviewed by an individual as an  
5                   ~~expected~~ ordinary step in forming a contract ~~or~~ , performing  
6                   under an existing contract, or fulfilling any obligation  
7                   required by the transaction.

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

9                   **Reporter's Note:** This is essentially the definition of  
10                  "Electronic transaction" appearing in Article 2B. The term  
11                  has been changed to "automated transaction" for clarity and  
12                  to avoid confusion in light of the title of this Act as the  
13                  "Electronic Transactions Act." It has also been expanded  
14                  from the August Draft to include governmental transactions.

15                  As with electronic agents, this definition is relevant  
16                  to those circumstances where electronic records may result  
17                  in action or performance which will bind a party although no  
18                  human review of the electronic records is anticipated or  
19                  occurs. Section 401(c) provides specific contract formation  
20                  rules where one or both parties do not review the electronic  
21                  records.

22                  (3) "Commercial transaction" means all matters  
23                  arising in a commercial setting, whether contractual or not  
24                  including, but not limited to, the following: any trade  
25                  transaction for the supply or exchange of goods, information  
26                  or services; distribution agreements; commercial  
27                  representation or agency; factoring; leasing; construction  
28                  of works; consulting; engineering; licensing; investment;  
29                  financing; banking; insurance; exploitation agreement or  
30                  concession; joint venture and other forms of industrial or  
31                  business cooperation or organization; carriage of goods or  
32                  passengers by air, sea, rail or road.

33                  **Source:** Uncitral Model Law

1 **Reporter's Note:** This definition has been added to the  
2 text. For purposes of this draft it also remains as part of  
3 the commentary to Section 103 Scope. **ISSUE FOR THE**  
4 **COMMITTEE:** Should this definition be retained in text or  
5 continued solely as commentary to the Section on Scope?

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

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

13 **Reporter's Note:** This definition is from Article 2B. The  
14 term is used principally with respect to the definition of  
15 "electronic agent" and "information." Questions were raised  
16 at the May meeting, not resolved at the September meeting,  
17 regarding its necessity. **ISSUE FOR THE COMMITTEE:** Is this a  
18 necessary definition? Is it an accurate definition?

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

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

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

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

32 ~~(D) language so positioned in a record or~~  
33 ~~display that a party cannot proceed without taking some~~  
34 ~~additional action with respect to the term or the reference;~~  
35 ~~or~~

36 ~~(E) language readily distinguishable in~~  
37 ~~another manner.~~

38 ~~In the case of an electronic record intended to evoke a~~  
39 ~~response without the need for review by an individual, a~~  
40 ~~term is conspicuous if it is in a form that would enable a~~  
41 ~~reasonably configured electronic agent to take it into~~  
42 ~~account or react to it without review of the record by an~~  
43 ~~individual~~



1 **Reporter's Note:** This definition has been deleted at the  
2 suggestion of members of the Drafting Committee.

3 ~~(6) "Consumer" means an individual who, at the~~  
4 ~~time of entering into a transaction does so primarily for~~  
5 ~~personal, family, or household purposes. [The term does not~~  
6 ~~include a person that enters into a transaction primarily~~  
7 ~~for profit making, professional, or commercial purposes,~~  
8 ~~including agricultural, investments, research, and business~~  
9 ~~and investment management, other than management of an~~  
10 ~~ordinary person's personal or family assets.]~~

11 **Reporter's Note:** This definition has been deleted as  
12 unnecessary. It is submitted, the definition of security  
13 procedure and the allocation of loss rules in Section 110  
14 eliminate the need for any distinction based on the status  
15 of parties as consumer/merchant, sophisticated,  
16 unsophisticated, or the like. The presumptions established  
17 by this draft depend on the adoption or agreement of parties  
18 to a commercially reasonable security procedure. Where a  
19 security procedure is not used or is shown to not be  
20 commercially reasonable, the party relying on the security  
21 procedure will bear the loss. The relying party is in the  
22 best position to assure itself that the level of security is  
23 sufficient for the transaction contemplated, and to  
24 implement the level of security it deems appropriate, or  
25 suffer the consequences.

26 (7 5) "Contract" means the total legal obligation  
27 which results from the parties' agreement as affected by  
28 this [Act] and as supplemented by other applicable rules of  
29 law.

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

31 (8 6) "Electronic" means electrical, digital,  
32 magnetic, optical, electromagnetic, or any other form of  
33 technology that ~~includes~~ entails capabilities similar to  
34 these technologies.

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

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

9                   (9 7) "Electronic agent" means a computer program  
10       or other electronic or automated means used, selected, or  
11       programmed by a party person to initiate or respond to  
12       electronic records or performances in whole or in part  
13       without review by an individual.

14       **Source:** Article 2B Draft Section 2B-102(a)(16).

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

28       While this Act proceeds on the paradigm that an  
29       electronic agent is capable of performing only within the  
30       technical strictures of its preset programming, it is  
31       conceivable that, within the useful life of this Act,  
32       electronic agents may be created with the ability to act  
33       autonomously, and not just automatically. That is, through  
34       developments in artificial intelligence, a computer may be  
35       able to "learn through experience, modify the instructions  
36       in their own programs, and even devise new instructions."  
37       Allen and Widdison, "Can Computers Make Contracts?" 9 Harv.  
38       J.L.&Tech 25 (Winter, 1996). At such time as this may  
39       occur, "Courts may ultimately conclude that an electronic  
40       agent is equivalent in all respects to a human agent..."  
41       Article 2B-102, Reporter's Note 10.

42       Section 303 and Section 401 make clear that the party  
43       that sets operations of an electronic agent in motion will  
44       be bound by the records and signatures resulting from such  
45       operations. A party would be bound by the actions of a  
46       computer program designed to act without human intervention,

1 as well as electronic and automated means such as telecopy  
2 and facsimile machines used by a party.

3 (10 8) "Electronic record" means a record  
4 created, stored, generated, received, or communicated by  
5 electronic means for use by, or storage in such as computer  
6 equipment and programs, an information system electronic  
7 data interchange, electronic or for transmission from one  
8 information system to another voice mail, facsimile, telex,  
9 telecopying, scanning, and similar technologies.

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

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

18 (11 9) "Electronic signature" means ~~letters,~~  
19 ~~characters, numbers, or other] symbols~~ any signature in  
20 electronic form, attached to or logically associated with an  
21 electronic record, executed or adopted by a party with  
22 present person or its electronic agent with intent to  
23 authenticate sign the electronic record.

24 **Source:** UCC Section 1-201(39); Illinois Model Section  
25 200(3).

26 **Reporter's Note:** As with electronic record, this definition  
27 is a subset of the broader defined term "signature." The  
28 purpose of the separate definition is principally one of  
29 clarity in extending the definition of signature to the  
30 electronic environment.

31 This definition has been simplified by using the  
32 defined term "signature" within this definition. The  
33 defined term "signature" has been expanded from the standard  
34 UCC definition to incorporate specifically the attributes  
35 normally attached to a written signature, and to track the  
36 concept of authentication as defined in Article 2B. The new  
37 definition of "signature" reflects the Committee's direction

1 to delete the term "authenticate" from the August Draft and  
2 incorporate that definition into "signature."

3 The key aspect of this definition lies in the necessity  
4 that the electronic signature be linked or logically  
5 associated with the record. For example, in the pen and ink  
6 context it is assumed that a symbol adopted by a party is  
7 attached to or located somewhere in the same paper that is  
8 intended to be authenticated. These tangible manifestations  
9 do not exist in the electronic environment, and accordingly,  
10 this definition expressly provides that the symbol must in  
11 some way be linked to, or associated with, the electronic  
12 record being authenticated. This linkage is consistent with  
13 the regulations promulgated by the Food and Drug  
14 Administration. 21 CFR Part 11 (March 20, 1997).

15 An electronic signature includes any symbol adopted by  
16 a party, so long as the requisite intent to sign  
17 (authenticate) the electronic record exists. The  
18 requirement that there be "present intent" to sign has been  
19 removed as a potential barrier to the efficacy of electronic  
20 signatures. While a contemporaneous signature would reflect  
21 a present intent to sign, the operations of an electronic  
22 agent which result in the creation of an electronic  
23 signature (See Section 303) may not be viewed by courts as  
24 manifesting a "present" intent since the act of programming  
25 the electronic agent may have occurred well before the  
26 attachment of the electronic signature.

27 A digital signature using public key encryption  
28 technology would qualify as an electronic signature, as  
29 would the mere appellation of one's name at the end of an e-  
30 mail message - so long as in each case the signature was  
31 applied with the intention to authenticate the electronic  
32 record with which it was associated. It is the adoption of  
33 the symbol with intention to authenticate that is  
34 controlling. See *Parma Tile Mosaic & Marble Co. v. Estate*  
35 *of Short*, 87 NY2d 524 (1996) where it was held that the  
36 automatic imprint of a firm name, programmed into a fax  
37 machine, was not a sufficient signature because of the  
38 absence of any intention to authenticate each document sent  
39 over the fax.

40 (~~12~~ 10) "Good faith" means honesty in fact and  
41 the observance of reasonable commercial standards of fair  
42 dealing.

43 **Source:** Article 1 Draft Section 1-201(22).

44 (11) "Governmental transaction" means all matters  
45 arising in any governmental setting, including, but not

1 limited to, the following: all communications, filings,  
2 reports, commercial documentation, or other electronic  
3 records relating to interactions between any governmental  
4 entity and any individual outside the government; and all  
5 intragovernmental communications, documents or other records  
6 employed in the conduct of governmental functions between or  
7 within any branch or agency of government.

8 **Source:** New

9 **Reporter's Note:** Patterned after the definition of  
10 "Commercial transaction," this definition has been added to  
11 the text. **ISSUE FOR THE DRAFTING COMMITTEE:** Is the  
12 definition complete and accurate? Should this definition be  
13 part of the text, or only set forth in the commentary to the  
14 Scope section?

15 (13 12) "Information" means data, text, images,  
16 sounds, codes, computer programs, software, databases, and  
17 the like.

18 **Source:** Article 2B Draft Section 2B-102(a)(22); Illinois  
19 Model Section 200(4).

20 (14 13) "Information system" means a system for  
21 creating, generating, sending, receiving, storing or  
22 otherwise processing information, including electronic  
23 records.

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

25 **Reporter's Note:** This term is used in the definition of  
26 electronic record and in Section 402 regarding the time and  
27 place of receipt of an electronic record. **ISSUE FOR THE**  
28 **COMMITTEE:** Is this definition accurate and complete?

29 ~~(15) "Manifest of Assent" means that a party or~~  
30 ~~its electronic agent has signed or otherwise clearly~~  
31 ~~indicated that a record or term in a record has been adopted~~  
32 ~~or accepted by the party or its electronic agent. A party or~~

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

**Reporter's Note:** The concept of Manifesting Assent has been moved to Section 108.

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

**Reporter's Note:** This definition has been deleted as unnecessary. See the Reporter's Note to the deletion of the definition of Consumer.

~~(17~~ 14) "Notify" means to communicate, or make available, information to another person in a form and manner as appropriate or required under the circumstances.

1       **Source:** Illinois Model Section 103(22) (June 4 Interim  
2       Draft).

3       **Reporter's Note:** Consistent with the provisions on receipt  
4       in Section 402, a notice sent to a party must be in a proper  
5       format to permit the recipient to use and understand the  
6       information. For example, sending a message notice to a  
7       recipient in the United States in Chinese would not suffice  
8       to notify the recipient of the content of the message, in  
9       the absence of proof that the recipient understood Chinese.  
10      Similarly, sending a notice in WordPerfect 7.0 may not be  
11      appropriate when many people do not have the capability to  
12      convert from that format. In such a case, a more universal  
13      format such as ASCII would be required.

14                   ~~(18) "Opportunity to Review" means that a record~~  
15      ~~or a term of a record is made available in a manner designed~~  
16      ~~to call it to the attention of the party and to permit~~  
17      ~~review of its terms or to enable an electronic agent to~~  
18      ~~react to the record or term.~~

19      **Reporter's Note:** The concept of Opportunity to Review has  
20      been moved to Section 109.

21                   ~~(19~~ 15) "Organization" means a person other than  
22      an individual.

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

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

26                   ~~(20~~ 16) "Person" means an individual,  
27      corporation, business trust, estate, trust, partnership,  
28      limited liability company, association, joint venture,  
29      ~~[government, governmental subdivision,~~ or agency or  
30      instrumentality,~~]~~ or any other legal or commercial entity.

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

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

1                   (17) "Presumption" or "presumed" means that the  
2 trier of fact must find the existence of the fact presumed  
3 unless and until evidence is introduced which would support  
4 a finding of its non-existence.

5 **Source:** UCC Section 1-201(31)

6 **Reporter's Note:** This definition becomes necessary to  
7 indicate the effect of the presumptions created by Sections  
8 202, 203 and 302. While the decision whether a presumption  
9 should be created is generally one of policy relating to the  
10 substantive law, the effect to be given to a presumption  
11 once created is generally left to the rules of evidence.

12 **ISSUE FOR THE COMMITTEE:** Should this Act should establish  
13 the effect of a presumption created by this Act.

14       This definition adopts the so-called "bursting bubble"  
15 approach to presumptions. That is, it only shifts the  
16 burden of producing evidence, but not the ultimate burden of  
17 persuasion. Although the Reporter has not yet seen the  
18 draft of the Uniform Rules of Evidence, my understanding  
19 from Professor Whinery, the Reporter for the Rules of  
20 Evidence project, is that committee is inclined toward a  
21 treatment of presumptions which will shift the burden of  
22 persuasion.

23                   ~~(21) "Receive," with respect to an electronic~~  
24 ~~record, means that the electronic record has entered an~~  
25 ~~information system in a form capable of being processed by a~~  
26 ~~system of that type and the recipient uses or has designated~~  
27 ~~that system for the purpose of receiving such records or~~  
28 ~~information.~~

29 **Reporter's Note:** This provision has been moved to Section  
30 402(b) .

31                   (22 18) "Record" means information that is  
32 inscribed on a tangible medium or that is stored in an  
33 electronic or other medium and is retrievable in perceivable  
34 form.

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



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

3 (23 19) "Rule of law" means a statute,  
4 regulation, ordinance, common-law rule, court decision, or  
5 other law relating to commercial or governmental  
6 transactions enacted, established, or promulgated by this  
7 State, or any agency, commission, department, court, other  
8 authority or political subdivision of this State.

9 **Source:** Oklahoma Model Section II.F; Illinois Model Section  
10 200(7).

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

15 (24 20) "Security procedure," with respect to  
16 either an electronic record or electronic signature, means a  
17 commercially reasonable procedure or methodology,  
18 established by law, by agreement, mutually or adopted by the  
19 parties, ~~or otherwise established to be a commercially~~  
20 ~~reasonable procedure, for the purpose of~~ verifying (i)  
21 the identity of the sender, or source, of an electronic  
22 record, or (ii) the integrity of, or detecting errors in,  
23 the transmission or informational content of an electronic  
24 record. A security procedure may require the use of  
25 algorithms or other codes, identifying words or numbers,  
26 encryption, callback or other acknowledgment procedures, ~~key~~  
27 ~~escrow,~~ or any other procedures that are reasonable under  
28 the circumstances.

1 **Source:** UCC Section 4A-201; Article 2B Draft Section 2B-  
2 115(a); Illinois Model Section 200(9); Oklahoma Model  
3 Section III.B.2.

4 **Reporter's Note:** This definition has been amended from the  
5 August draft to eliminate the possibility that a security  
6 procedure used, but not adopted, by the parties may  
7 subsequently be shown to be commercially reasonable and  
8 hence give rise to the presumptions provided in Section 202,  
9 203, and 302. That provision was unworkably vague.

10 By limiting security procedures to those which are both  
11 commercially reasonable and either agreed to or adopted by  
12 parties or established by law, much of the concern over the  
13 imposition of presumptions is eliminated. Section 110 sets  
14 forth loss allocation rules for situations where security  
15 procedures are shown to be commercially unreasonable or are  
16 not used at all. In such cases the party at risk is the  
17 party imposing the commercially unreasonable procedure, or  
18 the relying party where no procedure is used. In this way,  
19 the party with the greatest incentive to assess the risk of  
20 proceeding in a transaction with commercially unreasonable  
21 procedures, or indeed with no security procedure at all,  
22 will bear the loss.

23 The two key aspects of a security procedure are to  
24 identify the sender and assure the informational integrity  
25 of the record. The definition does not identify any  
26 particular technology. This permits the use of procedures  
27 which the parties select or which are established by law.  
28 It permits the greatest flexibility among the parties and  
29 allows for future technological development.

30 (25 21) "Signature" ~~includes~~ means any symbol,  
31 sound, process, or encryption of a record in whole or in  
32 part, executed or adopted by a person or the person's ~~with a~~  
33 ~~present~~ electronic agent with intent to ~~authenticate a~~  
34 ~~record~~

35 (i) identify the party;

36 (ii) adopt or accept a term or a record; or

37 (iii) establish the informational integrity of a record

38 or term that contains the signature or to which a

39 record containing the signature refers.

1 "Sign" means the execution or adoption of a signature by a  
2 person or the person's electronic agent.

3 **Source:** UCC Section 1-201(39); Article 2B Draft Section 2B-  
4 102(a) (3)

5 **Reporter's Note:** At the September Drafting Meeting, the  
6 consensus of the Committee and observers was to go back to  
7 the definition of signature, and to delete the definition of  
8 "authenticate." Given the purpose of this Act to equate  
9 electronic signatures with written signatures, the sense of  
10 the group was that retaining signature as the operative word  
11 would better accomplish that purpose. However, the idea of  
12 fleshing out the concept of authenticate present in the  
13 existing UCC definition of signature was thought to be wise.  
14 Therefore, the definitional concepts set forth in the prior  
15 definition of authenticate have been carried into this  
16 definition of signature.

17 (~~26~~ 22) "State agency" means any executive[,  
18 legislative or judicial] agency, department, board,  
19 commission, authority, institution, or instrumentality of  
20 this State or of any county, municipal or other political  
21 subdivision of this State.

22 **Source:** New.

23 **Reporter's Note:** This definition is required as a result of  
24 the expanded scope of the Act to cover governmental  
25 transactions. The reference to legislative and judicial  
26 agencies, etc. has been bracketed in light of comment from  
27 members of the Committee that these should not be included.

28 **ISSUE FOR THE COMMITTEE:** Should the legislative and judicial  
29 branches be excluded.

30 (23) "Term" means that portion of an agreement  
31 which relates to a particular matter.

32 **Source:** UCC Section 1-201(42)

33 **Reporter's Note:** This definition has been added because of  
34 the reference to terms of a record in the section on  
35 manifestation of assent and opportunity to review (Section  
36 108 and 109).

37 (~~27~~ 24) "Transferable record" means a record,  
38 other than a writing, that is an instrument or chattel paper

1 under Article 9 of the [Uniform Commercial Code] or a  
2 document of title under Article 1 of the [Uniform Commercial  
3 Code].

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

5 **Reporter's Note:** This definition is necessary in the event  
6 the Drafting Committee decides to retain the applicability  
7 of this Act to such records. See Section 405.

8 (28 25) "Writing" includes printing, typewriting,  
9 or any other intentional reduction to tangible form.

10 "Written" has a corresponding meaning.

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

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

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

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

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

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

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

~~e) to promote uniformity of the law among the  
states (and worldwide) relating to the use of electronic and  
similar technological means of effecting and performing  
commercial and governmental transactions;  
f) to promote public confidence in the validity,  
integrity and reliability of electronic commerce and  
governmental transactions; and  
g) to promote the development of the legal and  
business infrastructure necessary to implement electronic  
commerce and governmental transactions.~~

**Committee Vote:** The Committee voted 4-2 at the September Meeting to delete this section and place its substance in the commentary. The Observers present voted 18-4 to retain the section in the text.

**Reporter's Note:** The purposes have been moved to the commentary following Section 106 relating to Application and Construction. Although Section 106 smacks of a purposes clause, the Committee did not vote to delete that section.

**SECTION ~~104~~ 103. SCOPE.** Except as otherwise provided in Section ~~105~~ 104 or any regulation adopted pursuant to Part 5, this [Act] applies to electronic records and electronic signatures generated, stored, processed, communicated or used for any purpose in any commercial or governmental transaction.

**Source:** UETA Draft Section 104 (Aug. 15, 1997).

**Reporter's Note:**

1. The scope of the Act has been clarified by limiting its applicability to electronic records and adding electronic signatures. Further it has been clarified by specifically providing that regulations adopted by state agencies pursuant to the authorization granted in Part 5 may indicate the extent to which this Act shall apply.

2. The Scope of this Act is perhaps the single most difficult aspect in the drafting of this Act. In light of

1 the purpose of this Act to validate and effectuate  
2 electronic records and electronic signatures used in any  
3 commercial or governmental transaction the question may be  
4 asked whether any further limitations on its scope are  
5 necessary.

6 At the May meeting the Drafting Committee expressed  
7 strong reservations about applying this Act to all writings  
8 and signatures, as is contemplated in the Illinois,  
9 Massachusetts and other models. These same reservations  
10 were again raised at the September Meeting. However, the  
11 scope as currently drafted does **not** apply to all writings  
12 and records, but only to those arising in the context of a  
13 commercial or governmental transaction. Furthermore, as  
14 currently drafted the provisions of this Act are all default  
15 rules (except section 110 regarding certain allocations of  
16 loss) which can be changed by the parties (as part of their  
17 agreement) or governmental entities (pursuant to the  
18 regulations contemplated by Part 5) to fit the needs of the  
19 transaction.  
20

21 3. Although the scope of the Act is limited to the context  
22 of commercial and governmental transactions, the idea of a  
23 commercial transaction is to be broadly understood. In a  
24 footnote, the Uncitral Model Law provides that

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

39 This draft adopts this position.

40 4. Consistent with the expanded scope of the Act approved  
41 by the Scope and Program Committee this past summer, the  
42 scope has been expanded to cover governmental transactions.  
43 As in the case of commercial transaction, the idea of a  
44 governmental transaction is to be broadly understood.  
45

46 The term "governmental" should be broadly construed to  
47 include all matters arising in any governmental  
48 setting, including, but not limited to, the following:  
49 all communications, filings, reports, commercial

1 documentation, or other electronic records relating to  
2 interactions between any governmental entity and any  
3 individual outside the government; and all  
4 intragovernmental communications, documents or other  
5 records employed in the conduct of governmental  
6 functions between or within any branch or agency of  
7 government.

8 Since the circumstances under which any given State may  
9 wish, or be able, to adopt electronic means of conducting  
10 its business (either with the private sector or  
11 intragovernmentally) will differ, this Act simply provides  
12 authority for state entities to adopt the means to go  
13 electronic. Part 5 authorizes state entities to adopt rules  
14 and regulations to implement electronic transactions  
15 consistent with the particular needs of the particular  
16 agency.

17 5. **ISSUE FOR THE DRAFTING COMMITTEE:** Is it sufficient to  
18 leave the scope of commercial transactions and governmental  
19 transactions to commentary, or should the Act set forth  
20 specific definitions for these terms?

21 6. Section 104 sets forth exclusions to the coverage of  
22 this Act. The specific subsections relating to writings and  
23 signatures which allowed specific exclusions from those  
24 provisions have been deleted. Exclusions from coverage  
25 should be set forth in a single section.

26 ~~**SECTION 105. TRANSACTIONS SUBJECT TO OTHER LAW.**~~

27 ~~(a) [Unless otherwise expressly agreed by the parties,]~~  
28 ~~This [Act] does not apply to the extent that a transaction~~  
29 ~~is governed by:~~

30 ~~(1) rules of law relating to the creation or~~  
31 ~~execution of a will;~~

32 ~~(2) rules of law relating to the transfer, deposit~~  
33 ~~or withdrawal of money or financial credit;~~

34 ~~(3) rules of law relating to the creation,~~  
35 ~~performance or enforcement of an indenture, declaration of~~  
36 ~~trust or power of attorney;~~

1                   ~~(4) rules of law relating to the conveyancing of~~  
2 ~~real property;~~

3                   ~~(5) [OTHER]~~

4                   ~~(b) A transaction subject to this [Act] is also subject~~  
5 ~~to:~~

6                   ~~(1) any applicable rules of law relating to~~  
7 ~~consumer protection;~~

8                   ~~(2) [OTHER].~~

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

12                   **SECTION 104. TRANSACTIONS SUBJECT TO OTHER LAW.**

13                   (a) This [Act] does not apply to the extent that its  
14 application would involve a construction of a rule of law  
15 that is clearly inconsistent with the manifest intent of the  
16 lawmaking body or repugnant to the context of the same rule  
17 of law, provided that the mere requirement that information  
18 be "in writing," "written," "printed," "signed," or any  
19 other word that specifies or requires the use of a  
20 particular medium of presentation, communication or storage,  
21 shall not, by itself, be sufficient to establish such  
22 intent.

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

25                   (1) any applicable rules of law relating to  
26 consumer protection;



1                   (2) the Uniform Commercial Code as enacted in this  
2                   State; and

3                   (3) [OTHER][such other rules of law as may be  
4                   designated at the time of the enactment of this [Act]].

5                   (c) The provisions of this [Act] and a rule of law  
6                   referenced in subsection (a) or (b) must be construed  
7                   whenever reasonable as consistent with each other. If such  
8                   a construction is unreasonable a rule of law referenced in  
9                   subsection (a) or (b) governs.

10                   **Source:** UETA Draft Section 105 (Aug. 15, 1997);  
11                   Massachusetts Model Section 66(a)(i); Illinois Model Section  
12                   202(b)(1).

13                   **Reporter's Note:**

14                   1. This section has been revised based on the comments at  
15                   the September meeting.

16                   2. Subsection (a) sets forth a "repugnancy clause" similar  
17                   to those appearing in the Mass. and Ill. Acts. This general  
18                   exclusion is intended as a broad "catch-all" to assure that  
19                   where a rule of law manifests a clear intent for a paper  
20                   writing or an ink on paper signature it will not be  
21                   overridden by this Act. In the commercial context, where  
22                   the parties have not imposed such an ink on paper  
23                   requirement, it is difficult to think of a law which would  
24                   require ink on paper. For example the Statute of Frauds is  
25                   the perfect example of a statute requiring a signed writing  
26                   by its terms but with respect to which an electronic record  
27                   or signature would not be repugnant to the purposes of  
28                   creating a perceivable record, providing an evidentiary base  
29                   for the transaction, permitting retention of a record of the  
30                   transaction, or requiring application of a signature to  
31                   indicate assent to the terms in the writing. All of these  
32                   functions can be accomplished by electronic records and  
33                   electronic signatures as defined in this Act. However, if  
34                   such a rule of law existed, subsection (a) makes clear that  
35                   this Act would have no application to the extent of the  
36                   repugnancy.

37  
38                   3. Subsection (b) sets forth specific areas of law which  
39                   implicate a commercial transaction and which will govern  
40                   over this act to the extent inconsistent with this Act. The  
41                   volume of consumer protection laws which apply to commercial  
42                   transactions, as broadly defined in this Act, is varied and

1 vast. Consumer credit, leasing, sales and banking statutes  
2 exist which impose disclosure requirements on the commercial  
3 party when dealing with consumers. There would appear to be  
4 nothing manifestly repugnant to consumer disclosure laws if  
5 the disclosures were to be done electronically. Except for  
6 laws requiring a certain format (e.g., disclosures in 16  
7 point type), so long as procedures exist to establish that  
8 the requisite information was available to the consumer,  
9 courts should be able to construe such laws consistently  
10 with the provisions of this Act.

11 At the suggestion of Fred Miller, the section now makes  
12 the Act expressly subject to the UCC. One question in this  
13 regard relates to the interplay between Section 405 on  
14 transferable records and Articles 3 and 4.

15 4. Subsection (b) also retains a placeholder for other  
16 areas of law to which this Act should be subject.

17 5. Subsection (c) requires consistent construction of the  
18 provisions of this Act with any rule of law which otherwise  
19 would be excluded.

20 6. The inherent limitation on the scope of this Act to  
21 commercial and governmental transactions, eliminates the  
22 need to specifically exclude laws relating to wills and  
23 personal trusts, as these will not likely arise in the  
24 context of a commercial or governmental transaction.  
25 Further, the provisions of Part 5, being entirely in the  
26 nature of an opt-in provision for governmental entities,  
27 eliminates laws relating to governmental licensing,  
28 recording, and the like. Since the Act will only apply to  
29 the extent a State agency adopts its provisions, the vast  
30 majority of writing and signature requirements relating to  
31 governmental business are automatically excluded.

32 7. Concern was raised at the September meeting that the  
33 use of the term "rules of law" created ambiguity in whether  
34 the Act would apply in a given scenario. However, in  
35 dealing with repugnancy under subsection (a) and  
36 construction for consistency under subsection (c), there  
37 would appear to be no other solution. For example, if a  
38 given provision of a consumer protection statute requires  
39 "written" disclosures, a court would have to deal with that  
40 particular rule to determine whether the disclosures,  
41 consistent with that rule, can be effectively made  
42 electronically. A total exclusion for all consumer writing  
43 requirements would be too broad.

44 **SECTION ~~106~~ 105. VARIATION BY AGREEMENT.**

1 (a) As between parties involved in generating, storing,  
2 sending, receiving, or otherwise processing or using  
3 electronic records or electronic signatures, ~~and except as~~  
4 ~~otherwise provided,~~ the provisions of this [Act] may be  
5 varied by agreement, except:

6 (1) the obligations of good faith,  
7 reasonableness, diligence and care prescribed by this [Act]  
8 may not be disclaimed by agreement but the parties may by  
9 agreement determine the standards by which the performance  
10 of such obligations is to be measured if such standards are  
11 not manifestly unreasonable; and

12 (2) the rules in Section 110 regarding  
13 allocations of loss where no security procedure or  
14 commercially unreasonable security procedures are used in a  
15 transaction.

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

21 (c) This [Act] does not, ~~nor shall it be~~  
22 ~~construed to,~~ require that information records or signatures  
23 be ~~created~~ generated, stored, ~~transmitted~~ sent, received or  
24 otherwise processed or used ~~or communicated~~ by electronic  
25 means or in electronic form.

26 **Source:** UCC Section 1-102(3); Illinois Model Section 103.

1 **Reporter's Note:** Given the principal purpose of this Act to  
2 validate and effectuate the use of electronic media in  
3 commercial and governmental transactions, it is important to  
4 preserve the ability of the parties to establish their own  
5 requirements concerning the method of generating, storing  
6 and communicating with each other. This Act affects  
7 substantive rules of contract law in only limited ways (See  
8 especially Part 4), by giving effect to actions done  
9 electronically. Even in those cases, the parties remain  
10 free to alter the timing and effect of their communications.

11 The only provisions of the Act which may not be  
12 disclaimed by agreement are the obligations of good faith,  
13 reasonableness, diligence and care imposed by the Act, and  
14 allocation of loss provisions where less than commercially  
15 reasonable security procedures are used. **ISSUE FOR THE**  
16 **COMMITTEE:** Are there other provisions of this Act which  
17 should be mandatory?

18 ~~**SECTION 107. APPLICABLE LAW.**~~

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

25 ~~(1) the transaction is a consumer transaction~~  
26 ~~and that state or country is neither~~

27 ~~(A) the state or country in which the~~  
28 ~~consumer resides at the time the transaction becomes~~  
29 ~~enforceable or will reside within 30 days thereafter, nor~~

30 ~~(B) the state or country in which,~~  
31 ~~pursuant to the contract establishing the transaction, the~~  
32 ~~goods, services, or other consideration flowing to the~~  
33 ~~consumer are to be received by the consumer or a person~~  
34 ~~designated by the consumer;~~

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

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

~~SUBSECTION (B) ALTERNATIVE 1~~

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

~~SUBSECTION (B) ALTERNATIVE 2~~

~~————— (b) If subsection (a) does not apply or the  
agreement of the parties under subsection (a) is  
ineffective, the law determining the rights and obligations  
of parties with respect to any aspect of a transaction  
governed by this [Act] is the law that would ordinarily be  
selected by application of this state's conflict of laws  
principles[; provided, however, that if application of such  
principles to a transaction that is not a consumer  
transaction would result in the unenforceability of all or  
part of an agreement that is enforceable under the law of  
this state, the law governing those rights and obligations~~

1 ~~is the law of this state unless the transaction does not~~  
2 ~~bear an appropriate relationship to this state].~~

3 **Committee Vote:** The Committee voted 4-3 to delete this  
4 section. The observers polled 14-7 to retain the section.

5 ~~**SECTION 108. CHOICE OF FORUM.** The parties may choose~~  
6 ~~an exclusive judicial forum. However, in a consumer contract~~  
7 ~~the choice is not enforceable if the chosen jurisdiction~~  
8 ~~would not otherwise have jurisdiction over the consumer, the~~  
9 ~~consumer did not have adequate notice of the choice of forum~~  
10 ~~term and the choice [is fundamentally unfair to] and~~  
11 ~~[unreasonably burdens] the consumer. A choice of forum in a~~  
12 ~~term of an agreement is not exclusive unless the agreement~~  
13 ~~expressly so provides.~~

14 **Committee Vote:** The Committee voted 4-3 to delete this  
15 section. The observers polled 14-7 to retain the section.

16 ~~**SECTION 109**~~ **106. APPLICATION AND CONSTRUCTION.** This  
17 [Act] must be liberally construed and applied consistently  
18 with commercially reasonable practices under the  
19 circumstances and to promote its underlying purposes and  
20 policies.

21 **Source:** UCC Section 1-102

22 **Reporter's Note:** The following commentary, derived from the  
23 Illinois Electronic Commerce Security Act Section 102, has  
24 been moved from the text of former Section 103 in the August  
25 Draft.

26 The underlying purposes and policies of this Act are  
27 a) to facilitate and promote commerce and  
28 governmental transactions by validating and authorizing the  
29 use of electronic records and electronic signatures;  
30 b) to eliminate barriers to electronic commerce  
31 and governmental transactions resulting from uncertainties  
32 relating to writing and signature requirements;

1 c) to simplify, clarify and modernize the law  
2 governing commerce and governmental transactions through the  
3 use of electronic means;

4 d) to permit the continued expansion of commercial  
5 and governmental electronic practices through custom, usage  
6 and agreement of the parties;

7 e) to promote uniformity of the law among the  
8 states (and worldwide) relating to the use of electronic and  
9 similar technological means of effecting and performing  
10 commercial and governmental transactions;

11 f) to promote public confidence in the validity,  
12 integrity and reliability of electronic commerce and  
13 governmental transactions; and

14 g) to promote the development of the legal and  
15 business infrastructure necessary to implement electronic  
16 commerce and governmental transactions.

17 **SECTION ~~110~~ 107. COURSE OF PERFORMANCE, COURSE OF**  
18 **DEALING, AND USAGE OF TRADE.**

19 (a) A "course of performance" is a sequence of  
20 conduct between the parties to a particular transaction ~~that~~  
21 which exists if:

22 (1) the agreement of the parties with  
23 respect to the transaction involves repeated occasions for  
24 performance by a party;

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

27 (3) the other party, with knowledge of the  
28 nature of the performance and opportunity for objection to  
29 it, accepts the performance or acquiesces to it without  
30 objection.

31 (b) A "course of dealing" is a sequence of  
32 previous conduct between the parties to a particular  
33 transaction ~~that~~ which is fairly to be regarded as

1 establishing a common basis of understanding for  
2 interpreting their expressions and other conduct.

3 (c) A "usage of trade" is any practice or method  
4 of dealing having such regularity of observance in a place,  
5 vocation, or trade as to justify an expectation that it will  
6 be observed with respect to the transaction in question.  
7 The existence and scope of ~~such a~~ the usage are to be proved  
8 as facts. If it is established that ~~such a~~ the usage is  
9 embodied in a trade code or similar record, the  
10 interpretation of the record is a question of law.

11 (d) A course of performance or course of dealing  
12 between the parties or usage of trade in the vocation or  
13 trade in which they are engaged or of which they are or  
14 should be aware is relevant in ascertaining the meaning of  
15 the parties' agreement, may give particular meaning to  
16 specific terms of the agreement, and may supplement or  
17 qualify the terms of the agreement. A usage of trade  
18 applicable where only part of the performance under the  
19 agreement is to occur may be so utilized as to that part of  
20 the performance.

21 (e) The express terms of an agreement, [including  
22 ~~terms with respect~~ to which a party has manifested assent,]  
23 and any applicable course of performance, course of dealing,  
24 or usage of trade ~~shall~~ must be construed wherever  
25 reasonable as consistent with each other. If such a  
26 construction is unreasonable:



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

4 (2) ~~terms with respect to which either party~~  
5 ~~has manifested assent prevail over course of performance,~~  
6 ~~course of dealing, and usage of trade;~~ course of performance  
7 prevails over course of dealing and usage of trade; and

8 (3) course of performance prevails over  
9 ~~course of dealing and usage of trade; and~~

10 ~~\_\_\_\_\_ (4) course of dealing prevails over usage of~~  
11 trade.

12 (f) Evidence of a relevant usage of trade offered  
13 by one party is not admissible unless that party has given  
14 the other party such notice as the court finds sufficient to  
15 prevent unfair surprise to the ~~latter~~ other party.

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

17 **Reporter's Note:** This section follows the existing priority  
18 of construction found in UCC Sections 1-205 and 2-208. The  
19 priority to be given terms with respect to which either  
20 party has manifested assent, which appeared in the August  
21 Draft has been removed in light of the consensus of the  
22 Committee and observers that the distinction between terms  
23 expressly agreed to and those with respect to which a  
24 manifestation of assent has occurred was unnecessary and  
25 unwise. The bracketed language is proposed, however, to  
26 make clear that terms to which parties have manifested  
27 assent are express terms. Whether the committee adopts the  
28 bracketed language or not, the commentary will make clear  
29 that terms expressly agreed to and terms with respect to  
30 which a party manifests assent are both to be considered  
31 express terms and in case of conflict the issue is one of  
32 construing the express terms of the agreement.

33 **SECTION 108. MANIFESTING ASSENT.**

1        (a) A person or electronic agent manifests assent to a  
2        record or term in a record if, with knowledge of the terms  
3        or after having an opportunity to review the record or term  
4        under Section 109, it:

5        (1) signs the record or term, or engages in other  
6        affirmative conduct or operations that the record clearly  
7        provides or the circumstances, including the terms of the  
8        record, clearly indicate will constitute acceptance of the  
9        record or term; and

10       (2) had an opportunity to decline to sign the  
11       record or term or engage in the conduct.

12       (b) The mere retention of information or a record  
13       without objection is not a manifestation of assent.

14       (c) If assent to a particular term in addition to  
15       assent to a record is required, a person's conduct does not  
16       manifest assent to that term unless there was an opportunity  
17       to review the term and the signature or conduct relates  
18       specifically to the term.

19       (d) A manifestation of assent may be proved in any  
20       manner, including by showing that a procedure existed by  
21       which a person or an electronic agent must have engaged in  
22       conduct or operations that manifests assent to the record or  
23       term in order to proceed further in the transaction.

24       **Source:** Article 2B Draft Section 2B-112.

25       **Reporter's Note:** Derived from Article 2B, this section,  
26       together with the following section on "opportunity to  
27       review," is critical in determining what constitutes the  
28       agreement of parties when that agreement is formed  
29       electronically. Because of the nature of electronic media,

1 it may well be the case that a party does not deal with a  
2 human being on the other side of a transaction.

3 In an electronic environment where computers are often  
4 pre-programmed and operate without human review of the  
5 operations in any particular, discreet transaction, it is  
6 not always the case that two humans have reached a "bargain  
7 in fact," i.e., a "meeting of the minds." Rather, the  
8 agreement is often the result of one party or its electronic  
9 agent manifesting assent to terms or records presented to it  
10 on a "take it or leave it (i.e., exit)" basis, similar to  
11 the presentation of a standard form document in the paper  
12 environment.

13 The situations where parties participate in detailed  
14 negotiations leading to the formation of an integrated  
15 contract setting forth all the terms to which both parties  
16 have agreed are largely limited to transactions involving  
17 large amounts. Even outside the electronic environment, the  
18 use of pre-printed standard forms has supplanted detailed  
19 negotiations in many small amount transactions. Accordingly  
20 the concept of manifestation of assent to a record or terms  
21 of a record has supplemented the notion of actual agreement  
22 in determining that to which the parties have agreed to be  
23 bound (See Restatement (Second) Contracts Section 211, UCC  
24 Section 2-207).

25 Even in an electronic environment it remains possible  
26 to negotiate to agreement. In such a case, if parties  
27 engage in e-mail correspondence which results in a classic  
28 offer and acceptance of the terms (and only the terms) set  
29 forth in the correspondence, the electronic signatures  
30 appended to the e-mail messages serve to authenticate the  
31 records and result in contract formation. This is the case  
32 since an electronic signature, by definition, is made with  
33 intent to sign the record.

34 Contrasted with such a negotiated electronic contract  
35 is the situation where one calls up a provider on the  
36 Internet. The person determines to purchase the goods or  
37 services offered and is walked through a series of displayed  
38 buttons requesting the purchaser to agree to certain terms  
39 and conditions in order to obtain the goods and services.  
40 With each click on screen, the purchaser is indicating  
41 assent to that term in order to obtain the desired results.  
42 So long as the action of clicking in each case relates to a  
43 discreet term, or follows the full presentation of all  
44 terms, the actions of the purchaser can be said to clearly  
45 indicate assent to the terms available for review. As with  
46 the exchange of standard paper forms, there is no  
47 requirement that the terms be read before the on screen  
48 click occurs, so long as they were available to be read.  
49 Indeed, in such a scenario the problem of additional and  
50 conflicting terms which have so confused courts in the  
51 battle of the forms is not present.

1 A provision dealing with manifesting assent is  
2 particularly necessary in the electronic environment where  
3 the real possibility of a contract being formed by two  
4 machines exists. Sections 302 and 401 rely on the concept  
5 in determining when a signature occurs and what the terms of  
6 an agreement are when contracts or signatures result from  
7 the operations of electronic agents, either between  
8 electronic agents or when interacting with a human actor.

9 **SECTION 109. OPPORTUNITY TO REVIEW.** A person or  
10 electronic agent has an opportunity to review a record or  
11 term if it is made available in a manner which calls it to  
12 the attention of the person and permits review of its terms  
13 or enables the electronic agent to react to it.

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

15 **Reporter's Note:** See Reporter's Note to Section 108,  
16 Manifesting Assent, supra.

17 **SECTION 110. DETERMINATION OF COMMERCIALLY REASONABLE**  
18 **SECURITY PROCEDURE; COMMERCIALLY UNREASONABLE SECURITY**  
19 **PROCEDURE; NO SECURITY PROCEDURE.**

20 \_\_\_\_\_ (a) The commercial reasonableness of a security  
21 procedure is determined by the court in light of the  
22 purposes of the procedure and the circumstances at the time  
23 the parties agreed to or adopted the procedure including the  
24 nature of the transaction, sophistication of the parties,  
25 volume of similar transactions engaged in by either or both  
26 of the parties, availability of alternatives offered to but  
27 rejected by a party, cost of alternative procedures, and  
28 procedures in general use for similar transactions. A  
29 security procedure established by law shall be determined to  
30 be commercially reasonable for the purposes for which it was  
31 established.

1       (b) If a loss occurs because a person complies with a  
2       security procedure that was not commercially reasonable, the  
3       person that required use of the commercially unreasonable  
4       security procedure bears the loss unless it disclosed the  
5       nature of the risk to the other person and offered  
6       commercially reasonable alternatives that the person  
7       rejected. The liability of the person that required use of  
8       the commercially unreasonable security procedure is limited  
9       to losses that could not have been prevented by the exercise  
10      of reasonable care by the other person.

11      (c) Except as otherwise provided in subsection (b),  
12      Section 202, Section 203, or Section 302, if a loss occurs  
13      because no security procedure was used, the person relying  
14      on an electronic record or electronic signature as between  
15      the two parties, the party who relied bears the loss.

16      **Source:** Article 2B Draft Section 2B-115(c and d)

17      **Reporter's Note:** Coupled with the definition of security  
18      procedure (now limited to commercially reasonable party  
19      agreement or adoption or establishment by law), this  
20      provision sets forth key allocation of loss rules.

21      Where parties have agreed to or adopted commercially  
22      reasonable security procedures, the creation of presumptions  
23      about the identity of the source, and informational  
24      integrity, of an electronic record or the validity of an  
25      electronic signature should not pose the problems of unfair  
26      surprise and lack of sophistication which have been noted in  
27      the discussions of the propriety of the creation of  
28      presumptions. Even in the consumer transaction where a  
29      vendor "imposes" a security procedure, in order to continue  
30      in the transaction the consumer would manifest assent to the  
31      procedure, thereby adopting it. The burden would be on the  
32      vendor to establish the commercial reasonableness of the  
33      procedure, and if that were established, the limited  
34      presumption would attach.

35      Where a person "imposes" a security procedure which  
36      cannot be shown to be commercially reasonable, any liability  
37      or loss will be borne by that person under subsection (b)

1 unless the person explained the problems with the chosen  
2 procedure or offered alternatives. In the event that a  
3 transaction is accomplished without any security procedure,  
4 the party (usually a vendor) relying on the electronic  
5 record or signature will bear the liability for any loss.

6 By imposing the responsibility to invoke commercially  
7 reasonable procedures on the relying party, the vast  
8 majority of transactions will result in the more  
9 sophisticated party bearing the risk of loss. The need for  
10 distinctions based on the parties status as  
11 consumers/merchants, sophisticated/unsophisticated become  
12 unnecessary. Those persons wishing to use electronic  
13 commerce will bear the burdens, costs and risks of assuring  
14 themselves that the level of security is sufficient for  
15 their needs, given the significance of the transaction.

16 The exceptions in subsection (c) are noted for clarity.  
17 Sections 202, 203 and 302 deal with methods of attributing  
18 records, assuring the informational integrity of electronic  
19 records and establishing the efficacy of electronic  
20 signatures. While these sections address the use of  
21 security procedures, other means of proof and attribution  
22 are authorized. For example, if a person can establish that  
23 an electronic record is attributed to a person because it  
24 was the act of that person (Section 202(a)(1)), then the  
25 loss would not be placed on that person under subsection  
26 (c), even though no security procedure was used.

27 **SECTION 111. OBLIGATION OF GOOD FAITH.** There is an  
28 obligation to act in good faith in the formation,  
29 performance, and enforcement of every transaction and duty  
30 within the scope of this [Act].

31 **Source:** Article 1 Draft Section 1-305.

32 **Reporter's Note:** This section has been added in response to  
33 comments at the September Meeting.

34 **SECTION 112. GENERAL PRINCIPLES OF LAW APPLICABLE.**  
35 Unless displaced by the particular provisions of this  
36 [Act], the principles of law and equity, including the law  
37 merchant and the law relating to contract, principal and  
38 agent, estoppel, fraud, misrepresentation, duress, coercion,  
39 mistake, bankruptcy and other validating and invalidating  
40 cause shall supplement its provisions.

**Source:** UCC Section 1-103

**Reporter's Note:** This section has been added based on comments at the September Meeting. It is particularly important in light of the essentially procedural nature of this Act. This Act has only limited effect on substantive provisions of commercial law. Rather its principal effect is to validate electronic transactions so that the procedural hurdle of the media in which records and signatures must be presented can be overcome and the substance of the transaction can be considered. Accordingly, this section has been added to make clear that the substantive law underlying the transactions governed by the Act continue to be fully applicable.

The Revised draft of Article 1 has streamlined existing Section 103. An adaptation of the revision follows for the Committee's consideration:

Principles of law and equity may be used to supplement this [Act], except to the extent that those principles are inconsistent with the terms[, or underlying purposes and policies,] of a particular provision of this [Act].

**ISSUE FOR THE COMMITTEE:** Is the streamlined revision (with or without the bracketed language) preferable?

## PART 2

### ELECTRONIC RECORDS AND SIGNATURES GENERALLY

#### SECTION 201. LEGAL RECOGNITION OF ELECTRONIC RECORDS.

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

#### ~~SECTION 202. WRITINGS.~~

~~(a) Except as provided in subsection~~

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

~~(b)7~~ If a rule of law requires a record to be in

1 writing, or provides consequences if it is not, an  
2 electronic record satisfies that rule ~~of law~~.

3 (c) A person may establish reasonable  
4 requirements regarding the type of records which will be  
5 acceptable to it.

6 **Source:** UETA Draft Sections 201 and 202 (August 15, 1997);  
7 Uncitral Model Articles 5 and 6; Illinois Model Sections 201  
8 and 202.

9 **Reporter's Note:**

10 1. Parts 2, 3 and 4 reflect a fundamental reorganization  
11 of this Act. Part 2 now deals with those provisions  
12 relating to the validity, effect, and use of electronic  
13 records, Part 3 contains those sections dealing with the  
14 validity and effect of electronic signatures, and Part 4  
15 reflects general contract provisions, and provisions dealing  
16 with the effect of both electronic records and electronic  
17 signatures. Under different provisions of substantive law  
18 the legal effect and enforceability of an electronic record  
19 may be separate from the issue of whether the record  
20 contains a signature. For example, where notice must be  
21 given as part of a contractual obligation, the effectiveness  
22 of the notice will turn on whether the party provided the  
23 notice regardless of whether the notice was signed. An  
24 electronic record attributed to a party under Section 202  
25 would suffice in that case, notwithstanding that it may not  
26 contain a signature.

27 2. This section reflects a merger of former Sections 201  
28 and 202 from the August Draft.

29 3. Subsection (a) establishes the fundamental premise of  
30 this Act: That the form in which a record is generated,  
31 presented, communicated or stored may not be the only reason  
32 to deny the record legal recognition. On the other hand,  
33 subsection (a) should not be interpreted as establishing the  
34 legal effectiveness, validity or enforceability of any given  
35 record. Where a rule of law requires that the record  
36 contain minimum substantive content, the legal effect,  
37 validity or enforceability will depend on whether the record  
38 meets the substantive requirements. However, the fact that  
39 the information is set forth in an electronic, as opposed to  
40 paper record, is irrelevant.

41 4. Subsection (b) is a particularized application of  
42 Subsection (a). Its purpose is to validate and effectuate  
43 electronic records as the equivalent of writings, subject to  
44 all of the rules applicable to the efficacy of a writing,



1 except as such other rules are modified by the more specific  
2 provisions of this Act.

3 Illustration 1: A sends the following e-mail to B: "I  
4 hereby offer to buy widgets from you, delivery next  
5 Tuesday. /s/ A." B responds with the following e-mail:  
6 "I accept your offer to buy widgets for delivery next  
7 Tuesday. /s/ B." The e-mails may not be denied  
8 evidentiary effect solely because they are electronic.  
9 In addition, the e-mails do qualify as records under  
10 the Statute of Frauds. However, because there is no  
11 quantity stated in either record, the parties'  
12 agreement would be unenforceable under existing Section  
13 2-201(1).

14 Illustration 2: A sends the following e-mail to B: "I  
15 hereby offer to buy 100 widgets for \$1000, delivery  
16 next Tuesday. /s/ A." B responds with the following e-  
17 mail: "I accept your offer to purchase 100 widgets for  
18 \$1000, delivery next Tuesday. /s/ B." In this case the  
19 analysis is the same as in Illustration 1 except that  
20 here the records otherwise satisfy the requirements of  
21 UCC Section 2-201(1). The transaction may not be  
22 denied legal effect solely because there is not a pen  
23 and ink "signed writing."  
24

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

30 5. Subsection (c) is a particularized application of  
31 Section 105, to make clear that parties retain control in  
32 determining the types of records to be used and accepted in  
33 any given transaction.

34 6. Former Section 202(b) has been deleted as unnecessary  
35 because of the policy reflected in this draft to set forth  
36 all exclusions in Section 104.

37 **~~SECTION 403(a-b)~~ 202. ATTRIBUTION; ~~TRANSMISSION ERRORS~~**  
38 **OF ELECTRONIC RECORD TO A PARTY.**

39 (a) As between the parties, an electronic record  
40 ~~received by a party is attributable to a party indicated as~~  
41 ~~the sender if:~~

1                   (1) it was ~~sent by~~ in fact the action of that  
2 party, its agent, or its electronic agent;

3                   (2) the ~~receiving~~ other party, in good faith and  
4 in compliance with a security procedure for identifying the  
5 party concluded that ~~concluded that it was sent by~~ it was  
6 the action of the other party, its agent, or its electronic  
7 agent; or

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

10                   (A) resulted from acts of a person that  
11 obtained access to a security procedure, access numbers,  
12 codes, computer programs, or the like from a source under  
13 the control of the ~~alleged sender~~ party creating the  
14 appearance that the electronic record came from ~~the alleged~~  
15 ~~sender~~ that party;

16                   (B) the access occurred under circumstances  
17 constituting a failure to exercise reasonable care by the  
18 ~~alleged sender~~ party; and

19                   (C) the ~~receiving~~ other party reasonably  
20 relied to its detriment on the apparent source of the  
21 electronic record.

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

24                   (1) The ~~receiving~~ relying party has the burden of  
25 proving reasonable reliance, and the ~~alleged sender~~ party to

1       which the electronic record is to be attributed has the  
2       burden of proving reasonable care.

3               (2) Reliance on an electronic record that does  
4       not comply with ~~an agreed~~ a security procedure is not  
5       reasonable unless authorized by an individual representing  
6       the ~~alleged sender~~ party to which the electronic record is  
7       to be attributed.

8               (c) Attribution of an electronic record to a party  
9       under subsection (a)(2) creates a presumption that the  
10       electronic record was that of the party to which it is  
11       attributed.

12       **Source:** Article 2B Draft Section 2B-116.

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

19       Subsection (a)(1) relies on general agency law,  
20       including the new concept of electronic agency, to bind the  
21       sender. Subsections (a)(2) and (3) deal with allocations of  
22       risk where security procedures are involved. Under  
23       subsection (a)(2) an electronic record will be attributed to  
24       the sender if the recipient complied, in good faith, with a  
25       security procedure which confirmed the source of the  
26       electronic record. Subsection (a)(3) binds the purported  
27       sender of an electronic record where the sender's negligence  
28       in maintaining security procedures or the like has permitted  
29       the record to be sent and the recipient reasonably relied on  
30       the record to its detriment. Subsection (b) provides rules  
31       for the allocation of the burden of proof where negligence  
32       and reasonable reliance issues are present.

33       Subsection (c) is new and provides a rebuttable  
34       presumption of attribution where a security procedure is  
35       used. This presumption is appropriate because of the  
36       definition of security procedure which is now limited to  
37       procedures adopted by the parties or established by law  
38       which are also commercially reasonable. As Section 110  
39       makes clear, where a security procedure is shown to be  
40       commercially unreasonable, or where no security procedure is

1 used, the presumption will not apply and the loss generally  
2 will fall on the relying party.

3 **SECTION 203. DETECTION OF CHANGES AND ERRORS.**

4 (a) If through a security procedure to detect changes  
5 in informational content, the informational content of an  
6 electronic record can be shown to be unaltered since a  
7 specified point in time, the informational content shall be  
8 presumed to have been unaltered since that time.

9 ~~403(c)~~ (b) If an electronic record is created or sent  
10 in accordance with a security procedure for the detection of  
11 error, the information in the electronic record is presumed  
12 to be as intended by the person creating or sending it as to  
13 portions of the information to which the security procedure  
14 applies. ~~If an the electronic record was transmitted~~  
15 ~~pursuant to a security procedure for the detection of error~~  
16 ~~and the record nevertheless contained an error but the error~~  
17 ~~was not discovered,~~ the following rules apply:

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

22 (2) If the sender ~~pursuant to a security~~  
23 ~~procedure,~~ receives a notice of the content of the record as  
24 ~~received, the sender has a duty to~~ required by the security  
25 procedure that describes the content of the record as  
26 received, the sender shall review the notice and report any

1 error detected by it, in a commercially reasonable manner.  
2 Failure to so review and report any error shall bind the  
3 sender to the content of the record as received.————

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

14 ——— [(c) In an automated transaction involving an  
15 individual, the individual is not responsible for an  
16 electronic record that the individual did not intend but  
17 that was caused by an inadvertent error if, on learning of  
18 the other party's reliance on the erroneous electronic  
19 record, the individual:

20 ——— (1) in good faith promptly notifies the other  
21 party of the error and that the individual did not intend  
22 the electronic record received by the other party;

23 ——— (2) takes reasonable steps, including steps that  
24 conform to the other party's reasonable instructions, to  
25 return to the other party or destroy the consideration

1 received, if any, as a result of the erroneous electronic  
2 record; and

3 \_\_\_\_\_ (3) has not used or received the benefit or value  
4 of the consideration, if any, received from the other party.

5 \_\_\_\_\_ (d) In subsection (c), the burden of proving intent  
6 and lack of error is on the other party, and the individual  
7 has the burden of proving compliance with subsections  
8 (c) (1), (2), and (3).

9 \_\_\_\_\_ (e) In this section, "inadvertent error" means an  
10 error by an individual made in dealing with an electronic  
11 agent of the other party when the electronic agent of the  
12 other party did not allow for the correction of the error.]

13 **Source:** Article 2B draft Section 2B-117

14 **Reporter's Note:**

15 1. Like Section 202, this section allocates the risk of  
16 errors in transmission to the party that could have best  
17 detected the error through the use of a security procedure.  
18 Again, since the parties will have agreed or adopted the  
19 security procedure, the creation of the presumption of  
20 accuracy, and allocation to the party that should have  
21 discovered the error, should not pose undue hardship or  
22 unfair surprise on the party bearing the loss.

23 2. Section 2B-117(c) of the November 1, 1997 draft of  
24 Article 2B sets forth a new, rather elaborate defense for  
25 consumers when errors occur. As currently drafted the  
26 defense is limited to errors occurring because of system  
27 failures and not human error (as in the single stroke error  
28 of concern to a number of observers at the September  
29 Meeting). Because the allocation of losses under this draft  
30 turns on the use of security procedures and their commercial  
31 reasonableness and places the loss on the party choosing to  
32 rely on electronic records and electronic signatures, the  
33 distinction between consumers and merchants, and  
34 sophisticated and unsophisticated parties has been  
35 eliminated. Rather the burden is placed on the person  
36 consciously desiring the benefits of electronic media to  
37 assure that the level of security necessary exists.

38 However, the bracketed language attempts to address the  
39 issue of human error in the context of an automated

1 transaction. The reason for attempting to address this issue  
2 is that inadvertent errors occurring as the result of a  
3 single keystroke error do occur, and are difficult, if not  
4 impossible to retrieve, given the speed of electronic  
5 communications. However, the definition of "inadvertent  
6 error" would allow a vendor to provide an opportunity for  
7 the individual to confirm the information to be sent, in  
8 order to avoid the operation of this provision. By  
9 providing an opportunity to an individual to review and  
10 confirm the information initially sent, the other party can  
11 eliminate the possibility of the individual defending on the  
12 grounds of inadvertent error since the electronic agent,  
13 through confirmation, allowed for correction of the error.  
14 **ISSUE FOR THE DRAFTING COMMITTEE:** Is the bracketed language  
15 appropriate and should it be retained.

16 **SECTION 205-204. ORIGINALS: = INFORMATION ACCURACY.**

17 (a) If a rule of law [or a commercial practice]  
18 requires a record to be presented or retained in its  
19 original form, or provides consequences for the record not  
20 being presented or retained in its original form, that  
21 requirement is met by an electronic record if [the  
22 electronic record is shown to reflect accurately] [there  
23 exists a reliable assurance as to the integrity of] the  
24 information set forth in the electronic record from the time  
25 when it was first generated in its final form, as an  
26 electronic record or otherwise.

27 (b) The ~~criteria for assessing the~~ integrity and  
28 accuracy of the information in an electronic record ~~shall be~~  
29 are determined by whether the information has remained  
30 complete and unaltered, apart from the addition of any  
31 endorsement and any change ~~which~~ that arises in the normal  
32 course of communication, storage and display. The standard  
33 of reliability required ~~shall~~ must be assessed in the light

1 of the purpose for which the information was generated and  
2 in the light of all the relevant circumstances.

3 ~~\_\_\_\_\_ (c) The provisions of this article do not apply to the~~  
4 ~~following:\_\_\_\_\_.~~

5 **Source:** UETA Draft Section 205 (August 15, 1997);Uncitral  
6 Model Article 8; Illinois Model Section 204.

7 **Reporter's Note:**

8 1. This section deals with the serviceability of  
9 electronic records as originals. As was noted at the May  
10 meeting, the concept of an original electronic document is  
11 problematic. For example, as I draft this Act the question  
12 may be asked what is the "original" draft. My answer would  
13 be that the "original" is either on a disc or my hard drive  
14 to which the document has been initially saved. Since I  
15 periodically save the draft as I am working, the fact is  
16 that at times I save first to disc then to hard drive, and  
17 at others vice versa. In such a case the "original" may  
18 change from the information on my disc to the information on  
19 my hard drive. Indeed, as I understand computer operations,  
20 it may be argued that the "original" exists solely in RAM  
21 and, in a sense, the original is destroyed when a "copy" is  
22 saved to a disc or to the hard drive. In any event, the  
23 concern focuses on the integrity of the information, and not  
24 with its "originality." Given the recognition of this  
25 problem, the title of the section has been expanded to  
26 reflect the concern regarding the informational integrity of  
27 an electronic record; integrity which is assumed to exist in  
28 the case of an original writing.

29 2. A second question raised at the May meeting related to  
30 when the law requires an "original." Except in the context  
31 of paper tokens such as documents of title and negotiable  
32 instruments, most requirements for "originals" derive from  
33 commercial practice where the assurance of informational  
34 integrity is a concern. The comment to Illinois Model Law  
35 Section 204 (derived largely from Uncitral Model Law Summary  
36 Paragraph 62) identifies some of these situations as  
37 follows:

38 The requirement that a document be "an original" occurs  
39 in a variety of contexts for a variety of reasons.  
40 Documents of title and negotiable instruments, for  
41 example, typically require the endorsement and  
42 presentation of an original. But in many other  
43 situations it is essential that documents be  
44 transmitted unchanged (i.e., in their "original" form),  
45 so that other parties, such as in international  
46 commerce, may have confidence in their contents.



1 Examples of such documents that might require an  
2 "original" are trade documents such as weight  
3 certificates, agricultural certificates,  
4 quality/quantity certificates, inspection reports,  
5 insurance certificates, etc. Other non-business  
6 related documents which also typically require an  
7 original form include birth certificates and death  
8 certificates. When these documents exist on paper,  
9 they are usually only accepted if they are "original"  
10 to lessen the chance that they have been altered, which  
11 would be difficult to detect in copies.

12 Since requirements for "originals" are often the result of  
13 commercial practice and not an actual rule of law, the  
14 section includes the bracketed language regarding  
15 requirements derived from commercial practice. As a policy  
16 matter it is not at all clear that legislation should  
17 override established commercial practice. **ISSUE FOR THE**  
18 **DRAFTING COMMITTEE:** Should the bracketed language be  
19 retained or deleted?

20 3. So long as there exists reliable assurance that the  
21 electronic record accurately reproduces the information,  
22 this section continues the theme of establishing the  
23 functional equivalence of electronic and paper-based  
24 records. This is consistent with Fed.R.Evid. 1001(3) and  
25 Unif.R.Evid. 1001(3) (1974) which provide:

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

29 At the May meeting concern was expressed that the  
30 "reasonable assurance" standard was too vague. The first  
31 alternative tracks the language in the rules of evidence and  
32 focuses on the accuracy of the information presented. The  
33 second alternative is the language appearing in Section 204  
34 of the Illinois Model. **ISSUE FOR THE COMMITTEE:** Which  
35 alternative provision should be adopted?

36 4. Another issue relates to the use of originals for  
37 evidentiary purposes. In this context the concern  
38 principally relates to the "best evidence" or "original  
39 document" rule. The use of electronic records and  
40 signatures in evidence is addressed in Section 404 and its  
41 notes.

## 42 **SECTION 207 205. RETENTION OF ELECTRONIC RECORDS.**

43 (a) If a rule of law requires that certain documents,  
44 records, or information be retained, that requirement is met

1 by retaining electronic records, ~~if: provided that the~~  
2 ~~following conditions are satisfied:~~

3 (1) the information contained in the electronic  
4 record remains accessible so as to be usable for subsequent  
5 reference; ~~and~~

6 (2) the electronic record is retained in the  
7 format in which it was generated, stored, sent, or received,  
8 or in a format ~~which~~ that can be demonstrated to reflect  
9 accurately the information as originally generated, stored,  
10 sent, or received; and

11 (3) ~~such~~ the information, if any, is retained as  
12 enables the identification of the source of origin and  
13 destination of an electronic record and the date and time it  
14 was sent or received.

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

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

23 ~~— (d) The provisions of this section do not apply to~~  
24 ~~documents, records, or information excluded from the~~  
25 ~~provisions of Section 202 (Writings) or Section 203~~  
26 ~~(Signatures).~~

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

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

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

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

## PART 3

~~SECURE ELECTRONIC RECORDS AND SIGNATURES~~

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

~~SECTION 302. SECURE ELECTRONIC SIGNATURES. If,~~  
~~through the application of a security procedure, it can be~~

1 ~~verified that an electronic signature was, at the time it~~  
2 ~~was made, unique to the person using it, capable of~~  
3 ~~verification, under the sole control of the person using it,~~  
4 ~~and linked to the electronic record to which it relates in a~~  
5 ~~manner such that if the record was changed the electronic~~  
6 ~~signature would be invalidated, the signature is a secure~~  
7 ~~electronic signature.~~

8 **~~SECTION 303. PRESUMPTIONS.~~**

9 ~~(a) With respect to a secure electronic record, there~~  
10 ~~is a rebuttable presumption that the electronic record has~~  
11 ~~not been altered since the specific time to which the secure~~  
12 ~~status relates.~~

13 ~~—— (b) With respect to a secure electronic signature~~  
14 ~~there is a rebuttable presumption that;~~

15 ~~—— (1) the secure electronic signature is the~~  
16 ~~signature of the party to whom it relates; and~~

17 ~~—— (2) the secure electronic signature was affixed~~  
18 ~~by that party with the intention of signing the record.~~

19 ~~—— (c) In the absence of a secure electronic record or a~~  
20 ~~secure electronic signature, this [Act] does not create any~~  
21 ~~presumption regarding the authenticity and integrity of an~~  
22 ~~electronic record or an electronic signature.~~

23 **Reporter's Note:** The concept of secure electronic records  
24 and signatures has been deleted in this draft. Rather, this  
25 draft addresses the limited presumptions available through  
26 the use of a security procedure on a more discreet basis.  
27 Instead of creating a broad category of secure electronic  
28 records and signatures, where a security procedure is used,  
29 certain presumptions regarding attribution, or integrity of  
30 a record or existence of an electronic signature, are

1 provided in those sections addressing the effect of an  
2 electronic record or electronic signature.

3 This more discrete treatment is consistent with the  
4 overall reorganization in this draft. The purpose of the  
5 reorganization is to treat electronic records and electronic  
6 signatures separately because the issues relating to records  
7 and signatures under substantive rules of law are often  
8 distinct. If the current organization is approved by the  
9 Drafting Committee, it would seem to make more sense to  
10 treat the effect of the use of a security procedure in the  
11 general provisions regarding electronic records and  
12 electronic signatures.

13 The distinction is largely one of style. As noted in  
14 the August Draft, the separate creation of presumptions for  
15 secure electronic records and signatures in Part 3 was, in  
16 large part, alternative to the attribution rules for  
17 electronic records and the methods of proving electronic  
18 signatures. This draft reflects a decision to take the  
19 latter approach to the issue of presumptions. In addition,  
20 the approach taken is more consistent with the approach  
21 taken in Article 2B.

22 It is to be noted that the presumption attaching to an  
23 electronic signature executed in accordance with a security  
24 procedure is more limited under this draft than in the  
25 deleted section 303(b). The effect now is a simple  
26 presumption that an electronic record is signed by the  
27 signing party. There is no longer a presumption regarding  
28 the intention of the signer, although such a presumption may  
29 follow based on the definition of signature.

30 **ISSUE FOR THE DRAFTING COMMITTEE:** Is the approach and  
31 organizational structure of the current draft preferable?

## 32 **ELECTRONIC SIGNATURES GENERALLY**

### 33 **SECTION 203 301. LEGAL RECOGNITION OF ELECTRONIC** 34 **SIGNATURES.**

35 (a) A signature may not be denied legal effect,  
36 validity, or enforceability solely because it is in the form  
37 of an electronic signature.

38 ~~(a)~~ (b) If a rule of law requires a signature, or  
39 provides consequences in the absence of a signature, ~~that~~

1 the rule of law is satisfied with respect to an electronic  
2 record if the electronic record includes an electronic  
3 signature.

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

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

8 **Source:** Uncitral Model Article 7; Illinois Model Section  
9 203(a); Oklahoma Model Section IV.

10 **Reporter's Note:**

11 1. This section reflects a merger of former Sections 201  
12 (expanded to cover signatures) and 203 from the August  
13 Draft.

14 2. Subsection (a) establishes the fundamental premise of  
15 this Act: That the form in which a signature is generated,  
16 presented, communicated or stored may not be the only reason  
17 to deny the signature legal recognition. On the other hand,  
18 subsection (a) should not be interpreted as establishing the  
19 legal effectiveness, validity or enforceability of any given  
20 signature. Where a rule of law requires that a record be  
21 signed with minimum substantive requirements (as with a  
22 notarization), the legal effect, validity or enforceability  
23 will depend on whether the signature meets the substantive  
24 requirements. However, the fact that a signature appears in  
25 an electronic, as opposed to paper record, is irrelevant.

26 3. Subsection (b) is a particularized application of  
27 Subsection (a). Its purpose is to validate and effectuate  
28 electronic signatures as the equivalent of pen and ink  
29 signatures, subject to all of the rules applicable to the  
30 efficacy and formality of a signature, except as such other  
31 rules are modified by the more specific provisions of this  
32 Act.

33 4. This section, consistent with the existing UCC  
34 definition of a signature as "any symbol executed or adopted  
35 by a party with present intention to authenticate a  
36 writing," merely reiterates for clarity the rule that an  
37 electronic record containing an electronic signature  
38 satisfies legal requirements. The critical issue in either  
39 the signature or electronic signature context is what the  
40 signer intended by the execution, attachment or  
41 incorporation of the signature into the record.

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

11       6. Subsection (c) preserves the right of a party to  
12       establish reasonable requirements for the method and type of  
13       signatures which will be acceptable. Accordingly, and  
14       consistent with Section 105, a party may refuse to accept  
15       any electronic signature and of course establish the method  
16       and type of electronic signature which is acceptable.

17       7. Finally, former subsection 203(c) has been deleted.  
18       Exclusions from the coverage of this Act are set forth in  
19       Section 104.

20                    **SECTION ~~204~~ 302. ELECTRONIC SIGNATURES: EFFECT AND**  
21       **~~PROOF; SIGNATURES BY ELECTRONIC AGENTS.~~**

22                (a) Unless the circumstances otherwise indicate that a  
23       party intends less than all of the effect, an electronic  
24       signature is intended to establish ~~the signing party's~~  
25       ~~identity, its adoption and acceptance of a record or a term,~~  
26       ~~and the authenticity of the record or term.~~

- 27                    (1) the signing party's identity,  
28                    (2) its adoption and acceptance of a record or a  
29       term, and  
30                    (3) the informational integrity of the record or  
31       term to which the electronic signature is attached or with  
32       which it is logically associated.

1           ~~(b) Operations of an electronic agent constitute the~~  
2           ~~electronic signature of a party if the party designed,~~  
3           ~~programed, or selected the electronic agent for the purpose~~  
4           ~~of achieving results of that type.~~

5           ~~(c) [An electronic record is signed as a matter of law~~  
6           ~~if the party complied with a security procedure.~~  
7           ~~Otherwise,] An electronic signature may be proved in any~~  
8           ~~manner sufficient to demonstrate~~

9           (b) If the signing party executed or adopted the  
10          electronic signature in accordance with a security  
11          procedure, the electronic record to which the electronic  
12          signature is attached or with which it is logically  
13          associated is presumed to be signed by the signing party.  
14          Otherwise, an electronic signature may be proven in any  
15          manner, including by showing that

16               ~~(1) the signer's intention to authenticate the~~  
17               ~~electronic record, or term thereof, to which the electronic~~  
18               ~~signature is attached or relates, including by showing that~~  
19               ~~a procedure existed by which a party must of necessity have~~  
20               ~~signed, executed a symbol, or manifested assent to, a record~~  
21               ~~or term, in order to proceed further in the processing of~~  
22               ~~the transaction, or~~

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

25           ~~(d)~~ (c) The authenticity of, and authority to make, an  
26           electronic signature is admitted unless specifically denied



1 in the pleadings. If the validity of an electronic  
2 signature is denied in the pleadings, the burden of  
3 establishing validity is on the person claiming validity.

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

16 **Source:** Article 2B Draft Section 2B-118(a and c); UCC  
17 Section 3-308; Illinois Model Section 203.

18 **Reporter's Note:**

19 1. An electronic signature is any symbol or methodology  
20 adopted with intent to sign a writing. This Act includes in  
21 the definition of signature the attributes normally  
22 associated with a pen and ink signature in order to make  
23 clear what a signer intends by signing a document, i.e., to  
24 identify oneself, adopt the terms of the signed record, and  
25 verify the integrity of the informational content of the  
26 record which is signed. By identifying the multi-purpose  
27 effect of a signature, this Act clarifies the assumption as  
28 to the intent of one signing any record. Subsection (a)  
29 simply applies this assumption to the electronic signature.  
30 As with a signature on paper, the signing party remains free  
31 to prove that the signing was intended to accomplish only 1  
32 or 2 of the normal purposes associated with a signing.

33 2. Subsection (b) has been changed to delete the idea that  
34 an electronic record is signed as a matter of law when a  
35 security procedure is used. Instead, the section creates a  
36 presumption that a signature executed or adopted pursuant to

1 a security procedure is the signature of the signing party.  
2 The purpose of the change is to make clearer the effect of  
3 an electronic signature and to make the operation of  
4 security procedures in the signature context parallel to the  
5 operation of security procedures in the record context,  
6 i.e., the creation of a presumption. The presumption is  
7 limited to the factual issue of whether the electronic  
8 record is signed. The issue of the legal effect, validity  
9 or authenticity of the signature is left to other law.

10 Subsection (b) otherwise provides that an electronic  
11 signature may be proven in any manner including procedures  
12 necessitating the adoption of a term or record, or that the  
13 party is bound by the operations of its electronic agent  
14 (Section 303). By allowing proof of an electronic signature  
15 by showing that a process existed which had to be followed  
16 to obtain the results achieved, the section addresses the  
17 increasingly common "point and click" processes in on-line  
18 and on-screen programs.

19 Subsection (c) borrows from Article 3 in raising the  
20 procedural requirements for denying the validity of a  
21 signature (as distinct from the question of whether the  
22 electronic record is signed). Unless the validity of an  
23 electronic signature is specifically denied in the  
24 pleadings, the authenticity of and authority to make the  
25 signature are admitted. However, if the validity of the  
26 signature is put in issue by an express denial, the party  
27 asserting validity must carry the burden of so establishing.

28 Based on concerns raised by the Drafting Committee  
29 regarding the propriety of addressing notarial requirements  
30 in this Act, subsection (e) of former Section 204 has been  
31 deleted. The role of a trusted third party, i.e., the  
32 notary public, in assuring the identity of the signer of a  
33 notarized document is not covered by this Act as currently  
34 drafted.

35 **SECTION 303. [SIGNATURES BY] [OPERATIONS OF]**  
36 **ELECTRONIC AGENTS.**

37 (a) A party that designs, programs or selects an  
38 electronic agent is bound by operations of its electronic  
39 agent.

40 (b) An electronic record resulting from the operations  
41 of an electronic agent shall be deemed signed by a party  
42 designing, programming or selecting the electronic agent,

1 regardless of whether the operations result in the  
2 attachment or application of an electronic signature to the  
3 electronic record.

4 **Source:** UETA Draft Section 204(b) (August 15, 1997)

5 **Reporter's Note:**

6 1. This section has been revised to make clear that a  
7 person using an electronic agent is responsible for the  
8 results obtained by setting the electronic agent in motion,  
9 and will be deemed to have signed any such record.

10 2. This section extends signing to the electronic agent,  
11 automated context. Its purpose is to establish that by  
12 programming an electronic agent, a party assumes  
13 responsibility for electronic records and operations  
14 "executed" by the program. While the electronic agent may or  
15 may not execute a symbol representing an electronic  
16 signature (i.e., with human intent to authenticate the  
17 electronic record), the party programming the electronic  
18 agent has indicated its adoption of records and operations  
19 produced by the electronic agent within the parameters set  
20 by the programming. Accordingly, the party should be bound  
21 and deemed to have signed the records of the electronic  
22 agent.

23 **PART 4**

24 **ELECTRONIC CONTRACTS AND COMMUNICATIONS**

25 ~~**SECTION 401. EFFECTIVENESS BETWEEN PARTIES.**~~ (a)

26 ~~Except as otherwise provided in subsection (b), as between~~  
27 ~~the sender and the recipient of an electronic record, a~~  
28 ~~communication or other statement may not be denied legal~~  
29 ~~effect, validity, or enforceability solely on the grounds~~  
30 ~~that it is in the form of an electronic record.~~

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

32 ~~**SECTION 402**~~ **401. FORMATION AND VALIDITY.**

1           (a) ~~Unless otherwise agreed, an offer and the~~  
2           ~~acceptance of an offer may be expressed by means of~~  
3           ~~electronic records.~~ If an electronic record is used in the  
4           formation of a contract, the contract may not be denied  
5           legal effect, validity or enforceability on the sole ground  
6           that an electronic record was used for that purpose.

7           (b) ~~Subject to subsection (c), Operations of one or~~  
8           ~~more~~ electronic agents which confirm the existence of a  
9           contract or signify agreement may ~~are effective to~~ form a  
10          contract even if no individual ~~representing either party~~ was  
11          aware of or reviewed the ~~action or its results~~ operations.

12          (c) In an automated transaction, the following rules  
13          apply:

14               (1) A contract ~~is~~ may be formed by the  
15               interaction of two electronic agents. A contract is formed  
16               if the interaction results in ~~each~~ both electronic agents  
17               engaging in operations that signify agreement, such as by  
18               engaging in performing the contract, ordering or instructing  
19               performance, accepting performance, or making a record of  
20               the existence of a contract.

21               (2) A contract may be formed by the interaction  
22               of an electronic agent and an individual. A contract is  
23               formed by such interaction if ~~an~~ (A) the individual has  
24               reason to know (i) that the individual is dealing with an  
25               electronic agent and ~~performs actions the person should know~~  
26               ~~will cause~~ (ii) the ~~electronic agent to perform or~~

1 limitations on the ability of the electronic agent to permit  
2 further use, or that are clearly indicated as constituting  
3 acceptance regardless of other contemporaneous expressions  
4 by the individual to which the electronic agent cannot react  
5 to contemporaneous expressions by the individual and (B) the  
6 individual performs actions that the individual should know  
7 will cause the electronic agent to complete the transaction,  
8 perform or permit further use, or that are clearly indicated  
9 as constituting acceptance.

10 (3) The terms of a contract resulting from an  
11 automated transaction include terms of the parties'  
12 agreement (including terms with respect to which either  
13 party has manifested assent), terms ~~which~~ that the  
14 electronic agent could take into account, and, to the extent  
15 not covered by the foregoing, terms provided by law.

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

20 (1) the response signifying acceptance is  
21 received; or

22 (2) if the response consists of electronically  
23 performing the requested consideration in whole or in part,  
24 when the requested consideration, to be performed  
25 electronically, is received, unless the originating record  
26 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:**

1. Former UETA Section 401 has been deleted as redundant of the general efficacy provisions in Section 201(a) and 301(a).

2. The first sentence in Subsection (a) has been deleted as unnecessary and confusing. Subsection (a) makes clear that the use of electronic records, e.g., offer and acceptance, in the context of contract formation may not be the sole ground for denying validity to the contract. It is another particularized application of the general rules stated in Sections 201(a) and 301(a).

3. 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 contract formation by use of electronic agents in 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.

Subsection (c) has been redrafted to make clear that an individual dealing with an electronic agent must know both that it is dealing with an electronic agent and the limitations on the agent's ability to respond to the individual. Concerns were raised that individuals may not know what contemporaneous statements made by the individual would be given effect because of the potential for contemporaneous or subsequent human review. The burden would be on the party using an electronic agent to make clear the parameters of the agents ability to respond. If the party using the electronic agent provides such information, the individual's act of proceeding on the basis of contemporaneous expressions not within the parameters of the agent would be unreasonable and such expressions would not be included as terms of any resulting agreement.

4. 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 402.

1                   **SECTION ~~404~~ 402. TIME AND PLACE OF SENDING AND**  
2                   **RECEIPT.**

3                   (a) Unless otherwise agreed between the sender and the  
4                   recipient, an electronic record is sent when it enters an  
5                   information system outside the control of the sender or of a  
6                   person who sent the electronic record on behalf of the  
7                   sender.

8                   (b) Unless otherwise agreed between the sender and the  
9                   recipient, ~~the time of receipt of an electronic record is~~  
10                  ~~determined as follows:~~

11                  ~~————— (1) if the recipient has designated a specific~~  
12                  ~~information system for the purpose of receiving electronic~~  
13                  ~~records, receipt occurs:~~

14                  ~~————— (A) at the time when the electronic record~~  
15                  ~~enters the designated information system; or~~

16                  ~~————— (B) if the electronic record is sent to an~~  
17                  ~~information system of the addressee that is not the~~  
18                  ~~designated information system, at the time when the~~  
19                  ~~electronic record is retrieved by the recipient;~~

20                  ~~————— (2) if the recipient has not designated a~~  
21                  ~~specific information system, receipt occurs when the~~  
22                  ~~electronic record enters an information system of the~~  
23                  ~~recipient.~~

24                  an electronic record is received when the electronic record  
25                  enters an information system from which the recipient is  
26                  able to retrieve electronic records, in a form capable of

1 being processed by that system, and the recipient uses or  
2 has designated that system for the purpose of receiving such  
3 records or information. In addition, an electronic record  
4 is received when it comes to the attention of the recipient.

5 (c) Subsection (b) applies ~~notwithstanding that even~~  
6 if the place where the information system is located ~~may be~~  
7 is different from the place where the electronic record is  
8 considered to be received under subsection (d).

9 (d) Unless otherwise agreed between the sender and the  
10 recipient, an electronic record is ~~considered~~ deemed to be  
11 sent from ~~the place~~ where the sender has its place of  
12 business, and is ~~considered~~ deemed to be received ~~at the~~  
13 ~~place~~ where the recipient has its place of business. For  
14 the purposes of this subsection:

15 (1) if the sender or ~~the~~ recipient has more than  
16 one place of business, the place of business is that which  
17 has the closest relationship to the underlying transaction  
18 or, if there is no underlying transaction, the principal  
19 place of business; and

20 (2) if the sender or the recipient does not have  
21 a place of business, ~~reference~~ the place of business is ~~to~~  
22 ~~be made to its~~ the recipient's habitual residence.

23 (e) Subject to section ~~405~~ 403, an electronic record is  
24 effective when received, even if no individual is aware of  
25 its receipt.



1           ~~(f) The provisions of this section do not apply to the~~  
2           ~~following; [. . .].~~

3           **Source:** Article 2B Draft Section 2B-102(a) (34), and 2B-  
4           119(b); Uncitral Model Article 15.

5           **Reporter's Note:**

6           1. This section provides default rules regarding when an  
7           electronic record is sent and when and where an electronic  
8           record is received. As with acknowledgments of receipt  
9           under section 403, this section does not address the  
10          efficacy of the record that is received. That is, whether a  
11          record is unintelligible or unusable by a recipient is a  
12          separate issue from whether that record was received.

13          2. Subsection (b) is from the former definition of  
14          received in the August draft. It provides simply that when a  
15          record enters a system which the recipient has designated or  
16          uses and to which the recipient has access, in a form  
17          capable of being processed by that system it is received.  
18          Unless the parties have agreed otherwise, entry into any  
19          system to which the recipient has access will suffice. By  
20          keying receipt to a system which is accessible by the  
21          recipient, the issue of leaving messages with a server or  
22          other service is removed. However, the issue of how the  
23          sender proves the time of receipt is not resolved by this  
24          section. The last sentence provides the ultimate fallback by  
25          providing that in all events a record is received when it  
26          comes to the attention of the recipient.

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

33  
34               It is not uncommon for users of electronic commerce to  
35               communicate from one State to another without knowing  
36               the location of information systems through which  
37               communication is operated. In addition, the location  
38               of certain communication systems may change without  
39               either of the parties being aware of the change.

40          Accordingly, where the place of sending or receipt is an  
41          issue, the relevant location should be the location of the  
42          sender or recipient and not the location of the information  
43          system.

44  
45          4. Subsection (e) rejects the mailbox rule and provides  
46          that electronic records are effective on receipt. This

1 approach is consistent with Article 4A and, as to electronic  
2 records, Article 2B.

3 5. Subsection (f) has been deleted since all exclusions  
4 are intended to be included in Section 104.

5 **SECTION ~~405~~ 403. ELECTRONIC ACKNOWLEDGMENT OF RECEIPT.**

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

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

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

1                   (3)     If the sender requests electronic  
2     acknowledgment and specifies a time for receipt, if receipt  
3     does not occur within that time, the sender may treat the  
4     record as ~~not having binding effect~~ ~~[exercise the options~~  
5     ~~in subsection (2)]~~ expired.

6                   (b)     Receipt of electronic acknowledgment establishes  
7     that the record was received but, in itself, does not  
8     establish that the content sent corresponds to the content  
9     received.

10     **Source:** Article 2B Draft Section 2B-120; Uncitral Model  
11     Article 14.

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

18                   Subsection (a) permits the sender of a record to be the  
19     master of its communication by requesting or requiring  
20     acknowledgment of receipt. The subsection then sets out  
21     default rules for the effect of the original message under  
22     different circumstances. Article 2B Section 120(a) (3)  
23     permits the sender of a record who has requested  
24     acknowledgment by a specified time, if the acknowledgment is  
25     not timely received, to either revoke the record or specify  
26     a further period for acknowledgment, upon notice to the  
27     recipient under subsection (2). This draft permits the  
28     sender to treat the record as lapsing without further  
29     action.

30                   As noted in subsection (b) the only effect of a  
31     functional acknowledgment is to establish receipt. The  
32     acknowledgment alone does not affect questions regarding the  
33     binding effect of the acknowledgment nor the content,  
34     accuracy, time of receipt or other issues regarding the  
35     legal efficacy of the record or acknowledgment.

36     **QUESTION FOR THE COMMITTEE:** At the September Meeting a few  
37     comments suggested that acknowledgement of  
38     receipt/confirmation should be a condition to  
39     enforceability. Is this appropriate/desirable?

#### 40                   **SECTION 404. ADMISSIBILITY INTO EVIDENCE.**

1           (a) In any legal proceeding, ~~nothing in the~~  
2           ~~application of the rules of evidence shall apply so as~~ must  
3           not be applied to deny the admissibility in evidence of an  
4           electronic record or electronic signature ~~into evidence~~:

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

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

9           (b) In assessing the evidentiary weight of an  
10          electronic record or electronic signature, the trier of fact  
11          shall consider the manner in which the electronic record or  
12          electronic signature was generated, stored, communicated, or  
13          retrieved, the reliability of the manner in which the  
14          integrity of the electronic record or electronic signature  
15          was maintained, the manner in which its originator was  
16          identified or the electronic record was signed, and any  
17          other relevant information or circumstances.

18          **Source:** UETA Draft Section 206 (August 15, 1997); Uncitral  
19          Model Article 9; Illinois Model Section 205.

20          **Reporter's Note:** Like sections 201(a) and 301(a),  
21          subsection (a)(1) prevents the nonrecognition of electronic  
22          records and signatures solely on the ground of the media in  
23          which information is presented. Subsection (a)(2) also  
24          precludes inadmissibility on the ground an electronic record  
25          is not an original.

26          The first sentence of former Section 206(b) was deleted  
27          based on comments from members of the Drafting Committee as  
28          an inappropriate direction in the statute.

29          Nothing in this section relieves a party from  
30          establishing the necessary foundation for the admission of  
31          an electronic record. Subsection (b) gives guidance to the  
32          trier of fact in according weight to otherwise admissible  
33          electronic evidence.

**SECTION ~~406~~ 405. TRANSFERABLE RECORDS.** If the identity of the rightful holder of a transferable record can be reliably determined from the record itself or from a method employed for recording, registering, or otherwise evidencing the transfer of interests in such records, the rightful holder of the record is considered to be in possession of the record, ~~and any indorsements required by applicable rules of law to effect transfer to the rightful holder are considered to have been given.~~

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

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

The last clause has been deleted as unnecessary. Determination of the rightful holder would include showing all endorsements, or legal substitutes as in UCC Section 4-205. The key to this section is to create a means by which a "holder" may be considered to be in possession of an intangible electronic record. If technological advances result in an ability to identify a single "rightful holder" of a negotiable instrument electronic equivalent, the last hurdle to holder in due course status would be possession, which this section would provide.

## PART 5

~~PUBLIC~~ GOVERNMENTAL ELECTRONIC RECORDS

~~Section~~ SECTION 501. USE OF ELECTRONIC RECORDS BY STATE AGENCIES.

(a) [Except where expressly prohibited by statute,] Every state agency,~~through the adoption of appropriate regulations,~~ may create and retain electronic records in

1 ~~take place~~ of written records and may also convert written  
2 records to electronic records. ~~[Rules governing the~~  
3 ~~disposition of written records after conversion to~~  
4 ~~electronic records shall be established by the secretary of~~  
5 ~~state.]~~ [The [designated state officer] shall issue rules  
6 governing the disposition of written records after  
7 conversion to electronic records.]

8 (b) Any state agency that accepts the filing of  
9 records, or requires that records be created or retained by  
10 any person, may authorize, ~~through the adoption of~~  
11 ~~appropriate regulations,~~ the filing, creation, or retention  
12 of records in the form of electronic records [except where  
13 expressly prohibited by statute].

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

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

19 (2) ~~where~~ if electronic records must be  
20 electronically signed, the type of electronic signature  
21 required ~~(including, if applicable, requiring the use of a~~  
22 ~~secure electronic signature)~~, and the manner and format in  
23 which the electronic signature must be affixed to the  
24 electronic record;

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

4 (4) any other required attributes for electronic  
5 records ~~that~~ which are currently specified for corresponding  
6 non-electronic records.

7 (d) In establishing regulations under subsection (c)  
8 state agencies shall give due regard to regulations  
9 implemented by other state agencies, other states and the  
10 federal government for conflicting regulations which would  
11 impede commerce and the implementation of electronic  
12 transactions.

13 ~~(d)~~ (e) Nothing in this [Act] ~~shall~~ may be construed  
14 to require any state agency to use or permit the use of  
15 electronic records or signatures.

16 **Source:** Illinois Model Section 902; Massachusetts Model  
17 Section 3; Florida Electronic Signature Act, Chapter 96-324,  
18 Section 7 (1996).

19 **Reporter's Note:** This section addresses the expanded scope  
20 of this Act.

21 Subsection (a) authorizes state agencies to use  
22 electronic records generally for intra-governmental  
23 purposes. It is permissive and not obligatory (see  
24 Subsection (e)). It also authorizes the destruction of  
25 written records after conversion to electronic form. In  
26 this regard, the bracketed language requires the appropriate  
27 state officer to issue regulations governing such  
28 conversions.

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

35 Subsection (c) authorizes state agencies to establish  
36 regulations governing the quality of the electronic records  
37 and signatures which will be acceptable. The question here

1 is whether the state agencies should be required, or merely  
2 permitted, to promulgate such regulations before accepting  
3 electronic records? Should the task of promulgating  
4 regulations be left with the secretary of state or other  
5 central authority?

6 Based on comments at the September Drafting Meeting,  
7 subsection (d) exhorts the regulation making authority to  
8 give due consideration to other regulations adopted both  
9 within the state and by other states and federal government.

10 Finally, subsection (e) makes clear that nothing in  
11 this Act requires any state agency to accept or use  
12 electronic records.

## 13 **PART 6**

### 14 **MISCELLANEOUS PROVISIONS**

15 **SECTION 601. SEVERABILITY CLAUSE.** If a provision of  
16 this [Act], or an application thereof to any person or  
17 circumstance, is held invalid, the invalidity does not  
18 affect other provisions or applications of the [Act] that  
19 can be given effect without the invalid provision or  
20 application, and to this end the provisions of this [Act]  
21 are severable.

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

### 23 **SECTION 602. EFFECTIVE DATE.**

24 **Source:**

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

26 **Source:**