609 eSign on the Dotted Line—Improving the Use of Electronic Signatures

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eSigned, eSealed, & dLivered:
Keeping Pace with Electronic Transactions Law

by Rod Fiori
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The purchasing department of your company customarily accepts email bids from its domestic and overseas vendors. Your information services department routinely downloads shareware and other license agreements from the world wide web. Meanwhile, your business development department makes promises in emails to prospective clients that the folks down the hall in product development know nothing about. No question, technology has dramatically changed the dynamics of the everyday business world.

As in-house counsel, you cannot begin to police all of this outgoing email, and yet, you are responsible for protecting your company from unintended contracts and other problems associated with electronic transactions. Accordingly, in order to counsel your clients effectively and competently, you need to know about the enforceability of electronic signatures and electronic contracts. And that means keeping abreast of the new laws governing electronic commerce ("elaws") that have cropped up in recent years, both in the United States and abroad.

Rest easy, my cyber-weary colleague. Although new elaws support the proposition that email may create enforceable, signed, written contracts, they do not fundamentally alter traditional common law notions. Instead, these laws grant and define new tools, such as the electronic signature and the electronic agent. They also authorize the use of electronic documents and recognize and enforce them to the same extent as paper documents.

The devil may be in the details of elaws, however. Although the basics of contract formation remain, the loss of ceremony associated with a formal signing is not without ramifications. If you must stop to question whether a party intended a particular electronic symbol to constitute that party's binding signature, then contracts become less certain. The same may be true when you have electronic agents, rather than human beings, doing your company's bidding. Needless to say, you can get caught in the tension between the break-neck speed of modern commerce, on the one hand, and your own penchant for documentation and authentication, on the other.

But these new elaws also offer you benefits beyond the validation of electronic contracts, such as the opportunity to comply with your company's records retention obligations by electronically storing the data. You now may enjoy the convenience of electronic notaries and electronic affidavits and take advantage of electronically transferable records.

To advise and protect your company in electronic transactions, you need a firm grasp of the scope and effect of the new statutes. This article will give you that.

U.S. ELECTRONIC SIGNATURE LAW

California was the first state in the nation to enact the Uniform Electronic Transactions Act ("Uniform Act"),1 drafted and promulgated in 1999 by the National Conference of Commissioners on Uniform State Laws, an ad hoc association composed of volunteer commissioners from each state. At last count, 23 states had enacted all or portions of the Uniform Act,2 and six states and the District of Columbia had introduced the Uniform Act in their respective legislatures and/or were awaiting governors' signatures.3 See the Uniform Electronic Transactions Act sidebar for the lists. By contrast, it took nearly 10 years for the Uniform Commercial Code ("UCC"), also promulgated by the National Conference of Commissioners, to receive such acceptance.4

Although the states have done a remarkable job of enacting uniform elaws, Congress still found it necessary to intervene with the Electronic Signatures in Global and National Commerce Act ("Federal Act").5 The Federal Act, which took effect October 10, 2000, establishes national standards for electronic signatures, electronic contracts, and electronic records. Fortunately, more similarities than dissimilarities exist between the two acts.

The Federal Act encompasses any transaction in or affecting interstate or foreign commerce. Considering the U.S. Supreme Court's broad application of the Commerce Clause, the Federal Act engulfs virtually every commercial transaction, unless the act expressly exempts it. The Federal Act exempts from preemption the corresponding law in those states that have enacted the Uniform Act; and as you will see, both the Federal Act and the Uniform Act except many transactions, including most sections and articles of the UCC. Further, the Federal Act imposes additional restrictions on consumer transactions.

Perhaps the most noteworthy aspect of the Federal Act is the continued federalization of contracts and negotiable instruments law, both products of English common law and once exclusively in the realm of the state courts and legislatures. Although previously enacted federal law has had an effect on contracts and negotiable instruments, Congress has usually limited its scope and purpose, such as with the antidiscrimination acts.6 Not so here. Finally, the Federal Act provides that "the Secretary of Commerce shall promote the acceptance and use, on an international basis, of electronic signatures . . . ."7 Therefore, you should anticipate forthcoming regulations.

Defining eSignatures and eContracts

The foundation for both the Uniform Act and the Federal Act is the electronic signature ("esignature"). Both acts validate the use of esignatures when parties intend them to evidence transactions. The Uniform Act defines an esignature as follows: "An electronic sound, symbol, or process attached to or associated with, an electronic record and executed or adopted by a person with the intent to sign the record."8 The Federal Act employs nearly an identical definition: "An electronic sound, symbol, or process, attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record."9

You may wonder just what an electronic sound is. An electronic sound is any noise or tone made by your computer. Examples include a company jingle, music, the sounds of breaking waves or

birds chirping, or the clash of symbols. An electronic symbol can be any electronic media icon, notation, or representation, such as a company logo, a digital photograph or video, and virtually anything else electronic that you can imagine. The key to these definitions is that a party intends the electronic symbol or sound to constitute that party's signature.

Although neither the Uniform Act nor the Federal Act expressly defines an electronic contract ("econtract"), or even uses that term, both acts give force to a contract formed electronically by stating that it "shall not be denied legal effect because it is in electronic form or because an e-signature or electronic record was used in its formation."10 The acts make clear that binding contracts may be created by the exchange of email or by clicking "yes" to all of those click-on agreements so prevalent in internet transactions.

The Federal Act imposes additional requirements on consumer transactions. Consumers must affirmatively consent (a click-on suffices) to a binding electronic transaction.11 The vendor must also provide the consumer "a clear and conspicuous statement" that the consumer has the right to a hard copy of the contract free of charge.12 Should a vendor fail to obtain the consumer's consent, however, such omission would not make a contract unenforceable.13

The Federal Act also excludes voicemail and verbal and telephonic recordings as a means of securing an esignature or creating an econtract in consumer transactions.14 Virtually all major vendors record customer service lines nowadays.

The Interplay with Common Law

English common law has long enforced contracts that were not only unsigned, but also not in writing. In more contemporary times, U.S. courts and legislatures have filled in incomplete oral and written contracts with implied covenants and warranties and with terms and conditions supplied by the parties' expectations and evidenced by their conduct.

Under traditional notions of contract law, when a buyer emails a purchase order to a seller and the seller writes in a reply email, "I accept your contract," and types the seller's name at the end of the message, the parties probably have created a contract. The more critical questions, however, are the following:

- Have they created a written contract?
- Have they created a signed contract?

The Parol Evidence Rule

In cases involving a written contract, a party may invoke the parol evidence rule to preclude the admission of oral testimony at trial that would be inconsistent with contractual terms.15 If you would like to invoke the parol evidence rule, you must proffer to the court a writing that the parties have agreed upon. The Federal Rules of Evidence, for example, define writing in a manner that would include printed email and its electronic attachments.16 Thus, even under traditional notions of contract law, email could constitute a written contract, permitting you to use the parol evidence rule.17 <

The Statute of Frauds

The statute of frauds is a collective term that describes various statutory provisions that deny enforcement to certain classes of contracts unless they are reduced to writing and signed by the party to be charged.18 Such contracts include, for example, contracts that cannot be performed within one year, contracts of surety, and instruments granting an interest in real property.19 The Uniform Commercial Code further subjects contracts for the purchase and sale of personal property in excess of $5000 to the statute of frauds.20

So if you typed your name at the end of an email containing material contract terms, would it constitute your signature to a written contract under traditional notions of contract law? The answer is yes. The UCC employs the following definition of a signature:

> A signature may be made (i) manually or by means of a device or machine, and (ii) by use of any name, including a trade or assumed name, or by a word, mark, or symbol executed or adopted by a person with the present intention to authenticate a writing.21

Even in the absence of the Uniform Act and the Federal Act, email may constitute a signature to a binding written contract. As you will see below, however, both acts provide a much broader and more subjective definition of a signature.

Proving an eSignature

Both the Uniform Act and the Federal Act broadly define an esignature, specifying that it is any "sound, symbol, or process" that is "associated with an electronic record and executed or adopted by a person with the intent to sign the record." Such an open-ended definition may invite a high degree of subjectivity in interpreting whether certain electronic indicia indeed constitute an esignature. This subjectivity or ambiguity presents a challenge to in-house counsel. Consider the following circumstances:

- What if a seller emails to the buyer's CEO a request for a personal guarantee of the buyer's ability to pay on an underlying purchase order from buyer to seller, and the seller attaches a form guarantee? Thereafter, the buyer's CEO reply-emails to seller a message reading as follows: "I accept said terms." Here, there is an alleged surety, so you have a statute of frauds issue. The parties need a signed, written contract for their deal to be enforceable. Question: Did the buyer sign the contract? More precisely, did the buyer's email contain (1) the buyer's name? (2) the buyer's company name? (3) the buyer's company logo? (4) any other symbol that might be interpreted as the buyer's esignature? The location on the document of a name or symbol is important in determining whether an esignature exists. For example, the seller's guarantee form may have a signature block. A signature block by itself would not be interpreted as an esignature, but when the CEO affirmatively types the CEO's name on the block, surely the CEO has created an esignature.

- But what if, after the CEO has typed, "I accept said terms," the CEO merely types the CEO's name? Is the CEO simply identifying the CEO in the email, or is the CEO electronically signing the attached guarantee? What if the CEO's email software automatically places the CEO's name, company name, and company logo at the end of each of the CEO's electronic

messages? Does all of this information constitute an esignature, which is attached to an econtract (here, a personal guarantee), thereby creating a signed, written contract?

In answering these two questions, you must examine the outward manifestations of the putative electronic signatory's intent. This situation is no different from preelectronic contract formations. You have to ask, for example, whether there is any indication that the parties planned on executing a hard-copy agreement. Does the past course of dealings between the parties include the use of esignatures? Do the parties act as if they have executed a contract? Have they begun performance?

- What if, after having received the seller's email, the buyer's CEO calls the seller and leaves a voicemail saying the following: "I am calling to confirm that I accept the terms"? Can this voicemail be considered something "logically associated with an electronic record" and therefore viewed as an esignature under the Uniform Act and the Federal Act?

Sure. Voicemail is recorded electronically. It has a high degree of authenticity, which is not a necessary prerequisite for an esignature, but certainly serves to establish the party's intent to manifest the party's signature. Incidentally, at least one state's statute of frauds expressly declares that a telephone recording can constitute a writing subscribed by the party to be charged.22 So voicemail may become a component of a signed, written commercial contract.

But think of the litigation ramifications. Ordinarily, the parol evidence rule would bar voicemail. But here, the voicemail is the esignature and, therefore, part of the signed, written econtract. Because courts will almost always have to infer intent from the circumstances surrounding the econtract formation, they will have to admit a gamut of extrinsic evidence they normally would not consider in the adjudication of a traditionally signed contract. Courts should not look to evidence "outside the four corners" of a written contract when interpreting an unambiguous contract that contains a standard integration clause.23 Now, under both the Uniform Act and the Federal Act, courts will have to examine multiple emails, voicemail, PowerPoint presentations, and the like in order to find esignatures of the parties and to evaluate whether a contract was signed. Likewise, courts will have to consider these kinds of data to determine the terms of the contract.

- What if the buyer's CEO testifies that, when the CEO typed the words "I accept said terms" in the reply email and reiterated this message in the voice mail, the CEO was referring to the underlying purchase order from the CEO's company to the seller and not to the personal guarantee? What then?

Adopting eSignature Guidelines

As the foregoing what-ifs illustrate, esignatures can cause considerable confusion. You would be wise to adopt appropriate email guidelines to guard against surprise written, signed econtracts that a vendor may seek to enforce.

First, educate your client that emails can constitute esignatures to binding multimillion-dollar econtracts. Second, consider using an automatic footer in each company email that states, "This email does not constitute an esignature, and by this email, Company does not intend to enter into

a contract." Such language inserted in email or draft contracts "has generally been found to be strong (though not conclusive) evidence of intent not to be bound prior to execution."24

An obvious disadvantage to such a disclaimer is that there may be times-long after the fact-when you would like email to constitute an esignature to an econtract. And therein lies the challenge of econtracts. One party may interpret the exchange of detailed email containing material terms of a transaction as a signed, written contract, whereas the other party may view it as mere-albeit definitive-negotiations. As in-house counsel, you may not be involved in a transaction until it reaches a dispute level, and thus, your ability to influence the transaction at formation may be marginal. Once at the dispute level, you may want to divine a signed, written contract from email exchanges-or not, depending on which side of the transaction your company is on.

Keep in mind, also, that nothing in the two acts limits esignatures to subscription by human beings. That is, you should be able to divine esignatures on behalf of corporations, governments, partnerships, and the like, much as you discern regular signatures from a corporate or government seal.

Admonish your clients to guard against company personnel putting into email anything that they would not want to explain to a judge or jury. This practice not only will minimize surprise contracts, but also will work to prevent defamation, harassment, and discrimination claims. The most practical way to sensitize your clients in this regard is by dispensing information and advice through the intracompany newsletter and legal training sessions. I like to use real-life examples from published cases and the like to bring home the more salient points.

Authorizing Electronic Agents

Both the Uniform Act and the Federal Act introduce the notion of an electronic agent to conduct electronic business for you. The Uniform Act defines an electronic agent as follows: "A computer program or an electronic or other automated means used independently to initiate an action or respond to electronic records or performances in whole or in part without review or action by an individual."25 The Federal Act offers a similar definition.26 Electronic agents are computer programs and other automated processes that you can use to initiate or respond to electronic transactions. The Uniform Act further sets forth the following: "A contract may be formed by the interaction of electronic agents of the parties, even if no individual was aware of or reviewed the electronic agents' actions or resulting terms and agreements."27 The Federal Act is consistent with this concept.

You no doubt recall learning in law school that a necessary element of contract formation is a meeting of the minds between the parties. Electronic agents turn this requirement on end, however, completely removing human minds from the process. Now your computer can enter into contracts without you! You can use software programs that activate electronic agents to stand in for you-agents who do not need home office approval.

The eBay concept of auctions is a good example of parties relying on automated means to arrive at a binding contract. Suppose, for example, that Prince Charles decided to post the Crown Jewels for auction and sale with a $10,000 minimum floor with an online auction site and used the site software to conduct the auction. And suppose that a sole buyer timely bid $10,000 for the

jewels and that the online auction site software notified the parties of the results. Pursuant to the Uniform Act and the Federal Act, Prince Charles could not void the transaction because the online auction site software acted as the electronic agent for him and the buyer.

Other examples of electronic agents include the following:

- A company sends out 10,000 emails to sell products and attaches a software program to each that computes the variables of a contract. The attached software program serves as that company's electronic agent.
- A vendor has on its website a software program with decision trees to calculate contract terms and conditions.
- A buyer in desperate need of 100,000 widgets at a set price uses software to conduct a reverse auction for the widgets.
- A consumer in search of a home loan within certain parameters signs up with an electronic lender who deep-links into other electronic lender sites to find the loan. The consumer may have authorized the electronic lender to be an electronic agent.

You can be sure that your company will dabble with electronic agents, if it has not already, thereby creating binding contracts. Whether your company is responding to another company's electronic agent or engineering a software program as its own electronic agent, you will want to sensitize personnel about the need for legal advice regarding the creation of, and interaction with, such software programs. How should you do so?

As you can see from some of the examples above, you can marshal electronic agents as a valuable tool to move commerce, particularly fungible goods and services. When discussing electronic agents with managers, lead with this point before advising them of the pitfalls. It may also be helpful to implement a company-wide policy requiring anyone who would like to use an electronic agent to get advance approval from the legal department.

Other Noteworthy eLaw Provisions

Although these new electronic transactions laws generally serve to recognize and define esignatures and give legal effect to econtracts, they also endorse additional electronic features that should make your job easier. The objective is to reduce or eliminate paperwork and to make electronic transactions more convenient and secure.

- *Electronic Notaries and Electronic Affidavits*

Under both the Uniform Act and the Federal Act, a notary may notarize the esignature of a party with the notary's own esignature. Essentially, the acts permit a notary to authenticate esignatures. The notary may notarize an electronic document by employing the applicable statutory language and executing the document with the notary's own esignature.28 The acts do not specify whether the notary may omit statutory requirement(s) for a stamp, a seal, or other embossing.

Under the Uniform Act, an esignature coupled with a statement that any information contained in the record is true and correct constitutes an electronic affidavit.29 Now, a person can commit

perjury without swearing, taking an oath, placing his or her hand on a Bible, or signing his or her name, "under penalty of perjury."

Certainly, electronic notarizations and electronic affidavits are convenient tools that reduce unnecessary paperwork, but their use runs counter to the purpose of employing notaries and declarations-that is, to formalize and enhance the authentication of document execution. Attorneys routinely use declarations in law-and-motion and litigation practice. Litigators take great care to present affidavits with maximum grandeur and credibility. Frequently, declarations appear on bonded pleading paper, set off by the case caption and court name. I find it difficult, therefore, to envision a trial lawyer presenting an electronic affidavit to a judge and a jury. But you should know that, under the acts, they may do so.

· *Record Retention Obligations*

Many laws mandate the maintenance of certain records for defined time periods. For example, the Internal Revenue Service's regulations require tax filers to keep their records for specified lengths of time.30 Both the Federal Act and Uniform Act authorize the electronic storage of any records that you or your company is legally obligated to maintain.31 The Uniform Act even permits record retention obligations to be satisfied by using the services of a third party.32 But what standards should you employ when relying on these statutes to store data electronically? A backup server? Backup on floppy disc or CD-ROM? The acts are silent in this regard.

· *Venue and Jurisdiction*

Where a defendant has no place of business, other than cyberspace, the Uniform Act § 15(d)(2) deems the defendant's place of business to be the plaintiff's place of business. This notion may be extremely important. If the defendant is considered to be doing business in the plaintiff's state, then the plaintiff should be able to establish in personam jurisdiction over the defendant.

It is difficult to conceive, even for an internet company, that a defendant would not have a place of business, such as a banking location or a post office box. But websites frequently do not disclose such detail, an omission that may make it virtually impossible for a plaintiff to determine where a defendant company is headquartered or otherwise has a physical presence. If a plaintiff does not know a defendant's place of business and, pursuant to the Uniform Act, alleges that the defendant's place of business is the plaintiff's place of business, how does the plaintiff go about serving a complaint on the defendant?

Under the Federal Rules of Civil Procedure, the plaintiff can serve a defendant whose whereabouts are unknown by publication.33 So beware, counsel for cyber businesses. Your company may now be subject to personal jurisdiction in the state in which a plaintiff/commercial associate conducts business, but you do not. And a court may approve service of process upon your company via publication.

Notions of fair play and substantial justice would seem to require at least an email to your company informing it of the lawsuit, assuming your website posts an email address. You would

be well advised to avoid this pitfall by simply disclosing your company's place of business on its website.

· *Transferable Records*

In many ways, the Federal Act is more far-reaching than the Uniform Act. Nowhere is this situation more evident than in the Federal Act's application to transferable records. The act defines a transferable record as follows:

> [A]n electronic record that would be a note under Article 3 of the Uniform Commercial Code if the electronic record were in writing; the issuer of the electronic record expressly has agreed is a transferable record; and relates to a loan secured by real property.34

Under the Federal Act, you may execute a transferable record with an esignature. Thus, you may electronically create, execute, sell, and transfer-and in some jurisdictions,35 record and file-notes secured by real property. Traditionally, real property transactions, which represent the most important business many people transact in their lives, have received solemn ceremony. They must conform to the statute of frauds (as noted above) and to notary and recording requirements. With the introduction of electronic real estate records, the Electronic Age has truly arrived.

Certainly, you must expressly consent to having your real property notes become electronic agents, which means you may decline. But I predict that lenders will eventually place an added premium (perhaps reduce an extra point on a loan?) on securing notes that are electronic agents, so that they can sell and barter them electronically. Consumers who decide not to transmute their notes into electronic agents may see less favorable rates and terms than if they agreed.

Statutory Exceptions

You should be aware that the Uniform Act exempts wills, codicils, testamentary trusts, and the Uniform Computer Information Transactions Act.36 It also exempts the UCC, except for § 1-107 (waiver of claim after breach), § 1-206 (statute of frauds), article 2 (sale of goods), and article 2A (leases). Obviously, the states may augment or detract from the scope and reach of the Uniform Act and have done so. One state, for example, has exempted certain banking, lending, and insurance matters, real and personal property liens, investment securities, some consumer contracts and automobile transactions, and certain health care regulations.37 The Federal Act expressly exempts state and municipal procurement laws.38

The Federal Act also specifically excepts the following: wills and testamentary trusts; family law; UCC articles 2 (sale of goods) and 2A (leases); court orders, notices, documents, briefs, and pleadings; notices of cancellation of utility services; notices of default, acceleration, repossession, foreclosure, and eviction; notices of right to cure under a credit agreement secured by, or a rental agreement for, a primary residence; notices of cancellation or termination of health insurance or life insurance; notices of recall of a product; documents relating to the transportation and hauling of dangerous materials; and certain investment security prospectuses. (See sidebar chart summarizing the exemptions and exceptions to the Federal Act.)

Unlike the Uniform Act, the Federal Act applies to UCC §§ 1-107 and 1-206. Remember that, notwithstanding the act's exceptions for UCC articles 2 and 2A, email can constitute a signature under the UCC definition of signature.39

Finally, the Federal Act expressly applies to the "business of insurance,"40 but it limits the liability of agents and brokers involved in electronic insurance transactions.41

DIGITAL SIGNATURES

You must be careful not to confuse esignatures with digital signatures, which neither the Uniform Act nor the Federal Act addresses. In general, digital signatures are encrypted esignatures that a third party, known as the certification authority, authenticates as genuine with the issuance of what are known as "digital certificates." The certification authority frequently must meet certain licensing criteria. In some states, such as Illinois, a government agency, as well as a private party, may act as the certification authority.42

Unlike an esignature, a digital signature must be unique to and under the sole custody of the person using it. It also must be capable of verification by the certification authority and linked in such a manner that it becomes invalid when the underlying information, such as a contract, changes. Whereas a typewritten name, company name, or logo will suffice as an esignature-provided intent exists-it will not suffice as a digital signature unless it meets the prerequisite criteria.

Digital signatures are more secure, formal, and authentic than esignatures and do not pose problematic evidentiary issues. Thus, you may wish to implement procedures within your company to require the use of digital signatures for high-profile electronic contracts, contracts over a specified dollar amount, and high-liability contracts.

Unfortunately, several states employ inconsistent terminology in their signature laws. For example, New York43 and Texas44 use the term esignature to define what actually is a digital signature. Illinois not only recognizes esignatures and digital signatures, but also employs a hybrid term, secure esignatures, which is more formal than an ordinary esignature but does not involve the third-party certification authority necessary to create a digital signature.45 Although digital signatures are not widely used, ultimately, however, if we expect to document paperless transactions, then we must come to rely on and use digital signatures or some biometric (see below) or other electronic means to execute and authenticate documents.

INTERNATIONAL REGULATION

On June 5, 1998, Mah Bow Tan, the communications minister of Singapore, used a digital signature to sign a memorandum of understanding among Singapore, Canada, and the State of Pennsylvania. The Sinapore minister placed a smart card containing his signature into a reader and typed in his password to "sign" the document. The electronic execution of this memorandum took place at an Asia-Pacific Economic Cooperation Meeting on the Telecommunications and Information Industry. Canada's Minister of Industry and Pennsylvania Governor Tom Ridge

were not present at the meeting, but both had previously signed the document using encrypted digital signatures.

Although you may question whether the nature of the memorandum signing had more to do with politics than with practical considerations, this historic event illustrates how advanced electronic transactions are internationally. Many of the world's economies have laws recognizing esignatures, digital signatures, and the like. (See chart for a survey of international laws.) That so many nations have adopted ecommerce laws is a testament to people's great expectations in the New Economy. In advising a client eager to strut its high-tech savvy, however, you may find that international electronic transactions raise troubling conflict of law questions. For example, would a Florida state court enforce a digital signature certified by a certification authority under the law of South Korea? Or for that matter, would a Florida court enforce a digital signature certified under Illinois law?

Under general conflict of law principles, a local court would typically honor the law of another jurisdiction, provided that the law in question did not contravene the public policy of the local jurisdiction. One solution to such a conflict would be to ensure that the choice-of-law clause in your contract (Singapore, for example) is the same as the law used to obtain the digital signature and certification authority. Another solution would be to advise your company to insist upon two sets of digital signatures, one pursuant to the host country (South Korea, for example) and one pursuant to your company's home state (Florida).

The above issues notwithstanding, as international commerce becomes more paperless, you can expect the use of international esignatures and digital signatures to become routine.

BEYOND ELECTRONIC SIGNATURES

Having just predicted their routine use, I now forecast the eventual demise of esignatures and digital signatures. Biometric identification, which is already in effect, will probably replace them.

Biometric identification encompasses a broad category of technologies that provide precise confirmation of an individual's identity through the use of that individual's physiological or behavioral characteristics. Physiological characteristics include such relatively stable measurements as fingerprints, retinal scans, hand geometry, or facial features. Behavioral characteristics, which reflect an individual's personality, include voice prints, signatures, and keystrokes. Some companies are already using biometric technology for automated access control and for confirmation of an individual's actual presence at a specific location on a given date and at a given time.

Also on the way are subcutaneous implants, rice-sized transmitters encoded with statistical data that identify the wearer and receive power from the body's electrical energy. The data may include the wearer's date of birth, Social Security number, driver's license number, mother's maiden name, professional licensure, bank account and credit card account numbers, employer's name, gross earnings, blood type, DNA, and special medical needs, as well as any societal benefits to which the wearer may or may not be entitled.

Subcutaneous implants permit people and entities to electronically identify the wearers and verify vital statistical data about them instantaneously and with a high degree of certainty. Thus cleared, wearers then can enter and reap the benefits of the world of ecommerce. Updates of the encoded data may be accomplished through wireless, noninvasive means. No contact is necessary. The subcutaneous implant also permits the tracking of a wearer by global positioning satellites. Many industry experts tout this tiny implant as the solution to ensuring authentic identity in internet ecommerce transactions. Others see this Big Brother development as a more ominous sign of bad things to come.46

Why would anyone submit to such an implantation? Because they will be impressed by its marketing as an important safeguard to prevent children from being abducted or lost and to ascertain the whereabouts of soldiers, prisoners of war, employees, spouses, convicts, pets, and others. Already, many cellular phones and cars have rudimentary global positioning technology.

Companies that try to conduct business in traditional fashion, that is, with paper, instead of electronic media, will increasingly meet resistance from others. For years, as a matter of policy, governments have sought to reduce and eliminate paperwork.47 More recently, they have insisted on paperless transactions in certain business segments.48 When paperless transactions become the norm-certainly, that is the prediction-there will be a need to consummate electronic transactions in a secure, authentic, and trustworthy manner. You can anticipate hearing much more about biometric identifications or subcutaneous implants as the means to this end.

CONCLUSION

The recently enacted electronic transaction laws may seem otherworldly, but all they really do is grant new tools, such as electronic signatures, electronic agents, and transferable records, to support the formation of signed, written contracts. The common law rules of contracts remain unaltered.

In determining whether an esignature exists, you still must look for intent by the putative signatory to make an electronic sound or symbol the signatory's signature. Is the putative esignature on the signature block of an econtract? Or is it at the end of an electronic letter agreement? The location of a name or symbol on the electronic document is important in deciding whether an esignature exists. The previous course of dealings between parties might also shed light on whether the putative signatory intended to attach the signatory's signature.

To protect your company from the surprise contract, you may decide to use an automatic footer in emails to disclaim an esignature, unless expressly noted. You may also wish to admonish personnel to avoid email replies and voicemail that may be construed as assent to an econtract. Counsel them to be disciplined and conscientious about what they put in their email. Also, insist upon legal review of software programs, attached to outgoing email or within your company's website, that outline basic terms of a contract offer or that contain decision trees from which a contract offer may manifest.

Meanwhile, you should take advantage of what the new laws offer. Comply with your company's record retention obligations by electronically storing the necessary data. And know that notarizations, affidavits, and real-property trust deeds may be created electronically.

Until paperless transactions become the norm, I predict that the most frequent users of esignatures and digital signatures will be consumers who execute internet transactions in which they have the desire to consummate a deal immediately and no need to interface. I believe that businesspeople will continue to foster their relationships-even their short-term relationships-with in-person contacts and face-to-face contract formation and execution. The possible exceptions to my prediction would be such industries as health care and banking, which have been using something besides paper for creating binding contracts involving consumers and other businesses for more than a decade now.

By way of example, in 1998, I closed a small deal-under $1 million-with a German company in Germany. The other side and I easily could have negotiated the contract by telephone, video conference, facsimile, or email, but both of us realized the importance of in-person meetings in order to build trust and confidence and to avoid future misunderstandings. There was also another benefit to being in the same room to exchange signatures. Even though the closing took place at 10:30 in the morning, the Germans insisted that we seal the deal by drinking Weiss Beer and eating sausages. That's something your computer could never do.

NOTES

1. The text of the Uniform Electronic Transactions Act appears online at www.law.upenn.edu/bll/ulc/uecicta/uetast84.htm. As an example of a state Uniform Act statute, see CAL. CIV. CODE § 1633.1, et seq. (LEXIS Pub. 2000).
2. See Baker & McKenzie, Global E-Commerce Law, Uniform Act State-by-State Comparison Table, at www.bmck.com/ecommerce/uetacomp.htm.
3. Id.
4. See Martindale-Hubbell Law Digest UMA-65 (LEXIS Pub. 2000).
5. 15 U.S.C. § 7001 et seq. (2000).
6. See, e.g., The Fair Labor Standards Act, U.S. Code, Title 29, Chapter 8.
7. 15 U.S.C. § 7031 (a)(1).
8. Uniform Act, supra note 1, at § 2(8).
9. 15 U.S.C. § 7006.
10. Uniform Act, supra note 1, at § 7(a); 15 U.S.C. § 7001(a).
11. 15 U.S.C. § 7001(c).
12. 15 U.S.C. § 7001(c)(1)(B)(iv)(II).
13. 15 U.S.C. § 7001(c)(3). The Federal Act is silent as to the consequences, if any, to the vendor for such an omission.
14. 15 USCS §7001(c)(6).
15. See 1 SUMMARY OF CALIFORNIA LAW § 268 (Witkin Legal Inst.) (9th ed. 1987); see also CAL. CIV. PROC. CODE § 1856 (LEXIS Pub. 2000).
16. "For purposes of this article the following definitions are applicable: (1) Writings and recordings. 'Writings' and 'recordings' consist of letters, words, or numbers, or their equivalent,

set down by handwriting, typewriting, printing, photostating, photographing, magnetic impulse, mechanical or electronic recording, or other form of data compilation." FED. R. EVID. 1001; see also, e.g., 1 CALIFORNIA EVIDENCE BENCHBOOK, § 19.1, p. 450 (Calif. Judges Assn., 2d ed. 1982): A "writing . . . include(s) not only the commonly understood forms of writing, such as handwriting, typing, and printing, but also forms of tangible expression as recorded upon any tangible thing. This includes, therefore, sounds, symbols, words, pictures, letters, and combinations of these items."

17. In some states, deeming a contract to be in writing also gives the parties a longer statute of limitations. In California, for example, parties have a four-year statute of limitations for filing a legal action based on a written contract and a two-year statute of limitations for oral contracts. See CAL. CIV. PROC. CODE §§ 337, 339.

18. See 1 SUMMARY OF CALIFORNIA LAW § 261 (Witkin Legal Inst.) (9th ed. 1987).

19. See, e.g., CAL. CIV. CODE § 1624 (LEXIS Pub. 2000).

20. UCC § 1-206, Martindale-Hubbell Law Digest UMA 71 (LEXIS Pub. 2000).

21. UCC § 3-401(b), Martindale-Hubbell Law Digest UMA 158 (LEXIS Pub.2000).

22. See CAL. CIV. CODE § 1624. But contra are laws in New York, Texas, and Florida. Martindale-Hubbell Law Digest NY-17, TX-12, FL-11 (LEXIS Pub. 2000).

23. An integration clause is standard boilerplate in written contracts. Its purpose is to prevent prior or contemporaneous oral and extracontractual written statements and understandings from being part of the subject contract. I often employ the following standard integration clause: "This agreement constitutes the full and complete agreement and understanding between the parties hereto and shall supersede any and all prior and contemporaneous written and oral agreements concerning the subject matter contained herein."

24. Elvin Associates v. Aretha Franklin, 735 F. Supp. 1177, 1182 (S.D. NY 1990) (parentheses in original).

25. Uniform Act, supra note 1, at § 2(6).

26. See 15 U.S.C. § 7006(3).

27. Uniform Act, supra note 1, at § 14(1).

28. Uniform Act , supra note 1, at § 11; 15 U.S.C. § 7001(g).

29. Uniform Act, supra note 1, at § 12. The Federal Act is silent on electronic affidavits.

30. See 26 C.F.R. § 1.6001-1(e).

31. Uniform Act, supra note 1, at § 12; 15 U.S.C. §.7001(d).

32. Uniform Act, supra note 1, at § 12.

33. FED. R. CIV. P. 4(d).

34. 15 U.S.C. § 7021.

35. The Orange County (California) Recorder's Office, for example, permits electronic filing. See www.oc.ca.gov/recorder/govlink.htm.

36. Uniform Act, supra note 1, at § 3.

37. California has exempted the following transactions from its version of the Uniform Electronic Transactions Act: creation and execution of wills and testamentary trusts; negotiable instruments; bank deposits and collections; letters of credit; investment securities; secured transactions; funds transfers; liquidated damages and arbitration clauses in real property contracts; telephonic solicitations; releases of medical and genetic information; notices pursuant to the mobile home residency law; real property and condominium transfer notices; the Davis-Stirling Common Interest (condominium) Development Act; home solicitation contracts; home equity sales contracts; credit inquiries; consumer credit files; credit service contracts; deferred

deposits of personal checks; lemon law notices; the Unruh (retail installment sales contract) Act; sales of baggage by innkeepers; personal property deposited with hospital; shared appreciation loans for seniors; residential application fees and security deposits; dispositions of tenants' personal property; notices of mortgage defaults; reinstatements and foreclosures; notices by lenders of loan transfers; notices by and contracts with foreclosure consultants; notices regarding mortgage late fees; delinquencies and defaults; notice obligations for purchase money liens on residential property; the Rees-Levering Automobile Sales Finance Act; the Vehicle Leasing Act; automobile liens; health care enrollments; grievance resolutions with health care service plan providers; notices of cancellation of insurance contracts; notices of Medicare benefit changes; coverage denials by health care plan providers of enrollees with terminal illness; reimbursements and contests of health care plan claims; security deposits in mobile homes; insurers' denials of good driver discounts; notices of nonrenewable or insurance cancellations; insured's right to cancel insurance; print size requirements and required language for certain insurance contracts; premium increase notices; notices and procedures regarding insurance utilities; corrections of safety defects by automobile manufacturers; required type size in automobile broker agreements; and unlawful detainer notices. As you can see, the California legislature took care to exclude specific consumer, banking, and real property laws from the reach of the Uniform Act.

38. 15 U.S.C. § 7002.

39. See note 21, supra.

40. 15 U.S.C. §7001(j).

41. Id. The Act states:

An insurance agent or broker acting under the direction of a party [who] enters into a contract by means of an electronic record or electronic signature may not be held liable for any deficiency in the electronic procedures agreed to by the parties under that contract if the agent or broker had engaged in negligent, reckless, or intentional tortious conduct; the agent or broker was not involved in the development or establishment of such electronic procedures; and the agent or broker did not deviate from such policies.

42. See 5 ILL. COMP. STAT. 175, et seq. (2000).

43. N.Y. [STATE TECH.] L AW §§102-3 (Consol. 2000).

44. TEX. [BUS. & COM.] CODE § 2.108 (2000).

45. See 5 ILL. COMP. STAT. 175, et seq. (2000).

46. Many have noted the eerie similarity between biometric identification schemes and the marking system described in the biblical Book of Revelation: "And he causeth all, both small and great, rich and poor, free and bond, to receive a mark in their right hand, or in their foreheads: And that no man might buy or sell, save he that had the mark, or the name of the beast, or the number of his name." [emphasis added]Revelation: 13:16-17 (King James).

47. See Government Paper Elimination Act at www.bmck.com/ecommerce/congress.htm#2107.

48. Indeed, the U.S. Department of Defense declared that, as of December 31, 2000, all aspects of the contracting process for major weapons systems would be paperfree. See the "DoD Paperless Contracting" website at www.acq.osd.mil/pcipt.

Side Bar: Uniform Electronic Transactions Act

States That Have Enacted All or Portions of the Uniform Electronic Transactions Act

* Arizona.
* California.
* Delaware.
* Florida.
* Hawaii.
* Idaho.
* Indiana.
* Iowa.
* Kentucky.
* Kansas.
* Maine.
* Maryland.
* Michigan.
* Minnesota.
* Nebraska.
* North Carolina.
* Ohio.
* Oklahoma.
* Pennsylvania.
* Rhode Island.
* South Dakota.
* Utah.
* Virginia.

States That Have Introduced the Uniform Electronic Transactions Act in Their Legislatures and/or Are Awaiting Their Governors' Signatures

* Alabama.
* Arkansas.
* Colorado.
* District of Columbia.
* New Jersey.
* Vermont.
* West Virginia.

TransExemptions and Exceptions under the Electronic Signatures in Global and National Commerce Act

* States that have enacted the Uniform Electronic Transactions Act.
* Wills and testamentary trusts.
* Family law.
* UCC Articles 2 (sale of goods) and 2A (leases)-except that the Federal Act applies to UCC §§ 1-107 (waiver of claims after breach) and 1-206 (statute of frauds).
* Court orders, notices, documents, briefs, and pleadings.
* Notices of cancellation of utility service.
* Notices of default, acceleration, repossession, foreclosure, and eviction.
* Notices of right to cure under a credit agreement secured by, or a rental agreement for, a primary residence.
* Notices of cancellation or termination of health insurance or life insurance benefits.
* Notices of recall of a product.
* Documents relating to the transportation and hauling of dangerous materials.
* Certain investment security prospectuses.

Side Bar: Electronic Transaction Act: A Global Comparison at a Glance

Country	Electronic Transactions Act	Esignatures Addressed in Act?	Digital Signatures Addressed in Act?
Canada	Personal Information Protection and Electronic Documents Act; The House of Commons of Canada, Bill C-6 (formerly C-54), 2nd Session, 36th Parliament www.bmck.com/ecommerce/countrycomp.htm (2/17/01)	Yes	No
China	ICC Commission www.bmck.com/ecommerce/china.htm (2/14/01)	No	No
European Union	European Union Commerce Proposal www.bmck.com/ecommerce/countrycomp.htm (2/17/01)	Pending	Pending
Germany	Digital Signature Act www.iid.de/iukdg/sigve.html (2/17/01)	No	Yes
Hong Kong	Hong Kong Electronic Transactions Ordinance www.bmck.com/ecommerce/countrycomp.htm (2/17/01)	Yes	Yes
Japan	Law Concerning Electronic Signatures and Certification Services www.bmck.com/ecommerce/countrycomp.htm (2/17/01)	Yes	Yes
Russia	Russian Federation Federal Securities Market Commission Decree No. 9 www.amcham.ru/wp/e-com-e.htm (2/17/01)	Yes	No
South Korea	The Basic Law on Electronic Commerce www.bmck.com/ecommerce/countrycomp.htm (2/17/01)	No	Yes
United Kingdom	Electronic Communications Act of 2000 www.hmso.gov.uk/acts/acts2000/20000007.htm (2/17/01)	Yes	No

Explore information related to this topic.

- eCommerce website of Baker & McKenzie, www.bmck.com/ecommerce.htm.
- R. Fiori, *Exporting Encrypted Software*, SAN DIEGO DAILY TRANSCRIPT, Sept. 18, 2000, at www.sddt.com (source code: 20000918tz).
- R. Fiori, *Global Cyber Legislation Update: E-contracts and Digital Signatures*, HONG KONG INST. OF CO. SECRETARIES, vol. 10, no. 2 (Feb. 2000).
- Helena Haapio and Anita Smith, "Safe Sales in Cyberspace," *ACCA Docket* (July/August 2000).
- Ira J. Hammer, "Will Electric Signatures Make a Difference?: The Electric Signatures in Global and National Commerce Act," *Outside Counsel*, Summer/Fall 2000, at www.acca.com/protected/pubs/oc/summer00/Gibbons.pdf.
- S. IMPARL, INTERNET LAW (Specialty Technical Publishers 1998) (multivolume set).
- *Internet Law & Business*, monthly publication of Law Reporters, at www.lawreporters.com.
- J. MILLSTEIN & D. NEUNBURGER, DOING BUSINESS ON THE INTERNET (Law Journal Press 2000).
- The National Conference of Commissioners on Uniform State Laws ("NCCUSL") at www.nccusl.org/index.htm.
- *World Internet Law Report*, monthly publication of BNA International Inc., at www.bnai.com.

S.761 Electronic Signatures in Global and National Commerce Act

One Hundred Sixth Congress

of the

United States of America

AT THE SECOND SESSION

Begun and held at the City of Washington on Monday,

the twenty-fourth day of January, two thousand

An Act

To facilitate the use of electronic records and signatures in interstate or foreign commerce.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the `Electronic Signatures in Global and National Commerce Act'.

TITLE I--ELECTRONIC RECORDS AND SIGNATURES IN COMMERCE

SEC. 101. GENERAL RULE OF VALIDITY.

(a) IN GENERAL- Notwithstanding any statute, regulation, or other rule of law (other than this title and title II), with respect to any transaction in or affecting interstate or foreign commerce--

(1) a signature, contract, or other record relating to such transaction may not be denied legal effect, validity, or enforceability solely because it is in electronic form; and

(2) a contract relating to such transaction may not be denied legal effect, validity, or enforceability solely because an electronic signature or electronic record was used in its formation.

(b) PRESERVATION OF RIGHTS AND OBLIGATIONS- This title does not--

(1) limit, alter, or otherwise affect any requirement imposed by a statute, regulation, or rule of law relating to the rights and obligations of persons under such statute, regulation, or rule of law other than a requirement that contracts or other records be written, signed, or in nonelectronic form; or

(2) require any person to agree to use or accept electronic records or electronic

signatures, other than a governmental agency with respect to a record other than a contract to which it is a party.

(c) CONSUMER DISCLOSURES-

(1) CONSENT TO ELECTRONIC RECORDS- Notwithstanding subsection (a), if a statute, regulation, or other rule of law requires that information relating to a transaction or transactions in or affecting interstate or foreign commerce be provided or made available to a consumer in writing, the use of an electronic record to provide or make available (whichever is required) such information satisfies the requirement that such information be in writing if--

(A) the consumer has affirmatively consented to such use and has not withdrawn such consent;

(B) the consumer, prior to consenting, is provided with a clear and conspicuous statement--

(i) informing the consumer of (I) any right or option of the consumer to have the record provided or made available on paper or in nonelectronic form, and (II) the right of the consumer to withdraw the consent to have the record provided or made available in an electronic form and of any conditions, consequences (which may include termination of the parties' relationship), or fees in the event of such withdrawal;

(ii) informing the consumer of whether the consent applies (I) only to the particular transaction which gave rise to the obligation to provide the record, or (II) to identified categories of records that may be provided or made available during the course of the parties' relationship;

(iii) describing the procedures the consumer must use to withdraw consent as provided in clause (i) and to update information needed to contact the consumer electronically; and

(iv) informing the consumer (I) how, after the consent, the consumer may, upon request, obtain a paper copy of an electronic record, and (II) whether any fee will be charged for such copy;

(C) the consumer--

(i) prior to consenting, is provided with a statement of the hardware and software requirements for access to and retention of the electronic records; and

(ii) consents electronically, or confirms his or her consent electronically, in a manner that reasonably demonstrates that the consumer can access information in the electronic form that will be

used to provide the information that is the subject of the consent; and

(D) after the consent of a consumer in accordance with subparagraph (A), if a change in the hardware or software requirements needed to access or retain electronic records creates a material risk that the consumer will not be able to access or retain a subsequent electronic record that was the subject of the consent, the person providing the electronic record--

(i) provides the consumer with a statement of (I) the revised hardware and software requirements for access to and retention of the electronic records, and (II) the right to withdraw consent without the imposition of any fees for such withdrawal and without the imposition of any condition or consequence that was not disclosed under subparagraph (B)(i); and

(ii) again complies with subparagraph (C).

(2) OTHER RIGHTS-

(A) PRESERVATION OF CONSUMER PROTECTIONS- Nothing in this title affects the content or timing of any disclosure or other record required to be provided or made available to any consumer under any statute, regulation, or other rule of law.

(B) VERIFICATION OR ACKNOWLEDGMENT- If a law that was enacted prior to this Act expressly requires a record to be provided or made available by a specified method that requires verification or acknowledgment of receipt, the record may be provided or made available electronically only if the method used provides verification or acknowledgment of receipt (whichever is required).

(3) EFFECT OF FAILURE TO OBTAIN ELECTRONIC CONSENT OR CONFIRMATION OF CONSENT- The legal effectiveness, validity, or enforceability of any contract executed by a consumer shall not be denied solely because of the failure to obtain electronic consent or confirmation of consent by that consumer in accordance with paragraph (1)(C)(ii).

(4) PROSPECTIVE EFFECT- Withdrawal of consent by a consumer shall not affect the legal effectiveness, validity, or enforceability of electronic records provided or made available to that consumer in accordance with paragraph (1) prior to implementation of the consumer's withdrawal of consent. A consumer's withdrawal of consent shall be effective within a reasonable period of time after receipt of the withdrawal by the provider of the record. Failure to comply with paragraph (1)(D) may, at the election of the consumer, be treated as a withdrawal of consent for purposes of this paragraph.

(5) PRIOR CONSENT- This subsection does not apply to any records that are provided or made available to a consumer who has consented prior to the effective date of this title to receive such records in electronic form as permitted by any statute,

regulation, or other rule of law.

(6) ORAL COMMUNICATIONS- An oral communication or a recording of an oral communication shall not qualify as an electronic record for purposes of this subsection except as otherwise provided under applicable law.

(d) RETENTION OF CONTRACTS AND RECORDS-

(1) ACCURACY AND ACCESSIBILITY- If a statute, regulation, or other rule of law requires that a contract or other record relating to a transaction in or affecting interstate or foreign commerce be retained, that requirement is met by retaining an electronic record of the information in the contract or other record that--

(A) accurately reflects the information set forth in the contract or other record; and

(B) remains accessible to all persons who are entitled to access by statute, regulation, or rule of law, for the period required by such statute, regulation, or rule of law, in a form that is capable of being accurately reproduced for later reference, whether by transmission, printing, or otherwise.

(2) EXCEPTION- A requirement to retain a contract or other record in accordance with paragraph (1) does not apply to any information whose sole purpose is to enable the contract or other record to be sent, communicated, or received.

(3) ORIGINALS- If a statute, regulation, or other rule of law requires a contract or other record relating to a transaction in or affecting interstate or foreign commerce to be provided, available, or retained in its original form, or provides consequences if the contract or other record is not provided, available, or retained in its original form, that statute, regulation, or rule of law is satisfied by an electronic record that complies with paragraph (1).

(4) CHECKS- If a statute, regulation, or other rule of law requires the retention of a check, that requirement is satisfied by retention of an electronic record of the information on the front and back of the check in accordance with paragraph (1).

(e) ACCURACY AND ABILITY TO RETAIN CONTRACTS AND OTHER RECORDS- Notwithstanding subsection (a), if a statute, regulation, or other rule of law requires that a contract or other record relating to a transaction in or affecting interstate or foreign commerce be in writing, the legal effect, validity, or enforceability of an electronic record of such contract or other record may be denied if such electronic record is not in a form that is capable of being retained and accurately reproduced for later reference by all parties or persons who are entitled to retain the contract or other record.

(f) PROXIMITY- Nothing in this title affects the proximity required by any statute, regulation, or other rule of law with respect to any warning, notice, disclosure, or other record required to be posted, displayed, or publicly affixed.

(g) NOTARIZATION AND ACKNOWLEDGMENT- If a statute, regulation, or other rule of

law requires a signature or record relating to a transaction in or affecting interstate or foreign commerce to be notarized, acknowledged, verified, or made under oath, that requirement is satisfied if the electronic signature of the person authorized to perform those acts, together with all other information required to be included by other applicable statute, regulation, or rule of law, is attached to or logically associated with the signature or record.

(h) ELECTRONIC AGENTS- A contract or other record relating to a transaction in or affecting interstate or foreign commerce may not be denied legal effect, validity, or enforceability solely because its formation, creation, or delivery involved the action of one or more electronic agents so long as the action of any such electronic agent is legally attributable to the person to be bound.

(i) INSURANCE- It is the specific intent of the Congress that this title and title II apply to the business of insurance.

(j) INSURANCE AGENTS AND BROKERS- An insurance agent or broker acting under the direction of a party that enters into a contract by means of an electronic record or electronic signature may not be held liable for any deficiency in the electronic procedures agreed to by the parties under that contract if--

(1) the agent or broker has not engaged in negligent, reckless, or intentional tortious conduct;

(2) the agent or broker was not involved in the development or establishment of such electronic procedures; and

(3) the agent or broker did not deviate from such procedures.

SEC. 102. EXEMPTION TO PREEMPTION.

(a) IN GENERAL- A State statute, regulation, or other rule of law may modify, limit, or supersede the provisions of section 101 with respect to State law only if such statute, regulation, or rule of law--

(1) constitutes an enactment or adoption of the Uniform Electronic Transactions Act as approved and recommended for enactment in all the States by the National Conference of Commissioners on Uniform State Laws in 1999, except that any exception to the scope of such Act enacted by a State under section 3(b)(4) of such Act shall be preempted to the extent such exception is inconsistent with this title or title II, or would not be permitted under paragraph (2)(A)(ii) of this subsection; or

(2)(A) specifies the alternative procedures or requirements for the use or acceptance (or both) of electronic records or electronic signatures to establish the legal effect, validity, or enforceability of contracts or other records, if--

(i) such alternative procedures or requirements are consistent with this title and title II; and

(ii) such alternative procedures or requirements do not require, or accord greater legal status or effect to, the implementation or application of a specific

technology or technical specification for performing the functions of creating, storing, generating, receiving, communicating, or authenticating electronic records or electronic signatures; and

(B) if enacted or adopted after the date of the enactment of this Act, makes specific reference to this Act.

(b) EXCEPTIONS FOR ACTIONS BY STATES AS MARKET PARTICIPANTS- Subsection (a)(2)(A)(ii) shall not apply to the statutes, regulations, or other rules of law governing procurement by any State, or any agency or instrumentality thereof.

(c) PREVENTION OF CIRCUMVENTION- Subsection (a) does not permit a State to circumvent this title or title II through the imposition of nonelectronic delivery methods under section 8(b)(2) of the Uniform Electronic Transactions Act.

SEC. 103. SPECIFIC EXCEPTIONS.

(a) EXCEPTED REQUIREMENTS- The provisions of section 101 shall not apply to a contract or other record to the extent it is governed by--

(1) a statute, regulation, or other rule of law governing the creation and execution of wills, codicils, or testamentary trusts;

(2) a State statute, regulation, or other rule of law governing adoption, divorce, or other matters of family law; or

(3) the Uniform Commercial Code, as in effect in any State, other than sections 1-107 and 1-206 and Articles 2 and 2A.

(b) ADDITIONAL EXCEPTIONS- The provisions of section 101 shall not apply to--

(1) court orders or notices, or official court documents (including briefs, pleadings, and other writings) required to be executed in connection with court proceedings;

(2) any notice of--

(A) the cancellation or termination of utility services (including water, heat, and power);

(B) default, acceleration, repossession, foreclosure, or eviction, or the right to cure, under a credit agreement secured by, or a rental agreement for, a primary residence of an individual;

(C) the cancellation or termination of health insurance or benefits or life insurance benefits (excluding annuities); or

(D) recall of a product, or material failure of a product, that risks endangering health or safety; or

(3) any document required to accompany any transportation or handling of hazardous materials, pesticides, or other toxic or dangerous materials.

(c) REVIEW OF EXCEPTIONS-

(1) EVALUATION REQUIRED- The Secretary of Commerce, acting through the Assistant Secretary for Communications and Information, shall review the operation of the exceptions in subsections (a) and (b) to evaluate, over a period of 3 years, whether such exceptions continue to be necessary for the protection of consumers. Within 3 years after the date of enactment of this Act, the Assistant Secretary shall submit a report to the Congress on the results of such evaluation.

(2) DETERMINATIONS- If a Federal regulatory agency, with respect to matter within its jurisdiction, determines after notice and an opportunity for public comment, and publishes a finding, that one or more such exceptions are no longer necessary for the protection of consumers and eliminating such exceptions will not increase the material risk of harm to consumers, such agency may extend the application of section 101 to the exceptions identified in such finding.

SEC. 104. APPLICABILITY TO FEDERAL AND STATE GOVERNMENTS.

(a) FILING AND ACCESS REQUIREMENTS- Subject to subsection (c)(2), nothing in this title limits or supersedes any requirement by a Federal regulatory agency, self-regulatory organization, or State regulatory agency that records be filed with such agency or organization in accordance with specified standards or formats.

(b) PRESERVATION OF EXISTING RULEMAKING AUTHORITY-

(1) USE OF AUTHORITY TO INTERPRET- Subject to paragraph (2) and subsection (c), a Federal regulatory agency or State regulatory agency that is responsible for rulemaking under any other statute may interpret section 101 with respect to such statute through--

(A) the issuance of regulations pursuant to a statute; or

(B) to the extent such agency is authorized by statute to issue orders or guidance, the issuance of orders or guidance of general applicability that are publicly available and published (in the Federal Register in the case of an order or guidance issued by a Federal regulatory agency).

This paragraph does not grant any Federal regulatory agency or State regulatory agency authority to issue regulations, orders, or guidance pursuant to any statute that does not authorize such issuance.

(2) LIMITATIONS ON INTERPRETATION AUTHORITY- Notwithstanding paragraph (1), a Federal regulatory agency shall not adopt any regulation, order, or guidance described in paragraph (1), and a State regulatory agency is preempted by section 101 from adopting any regulation, order, or guidance described in paragraph (1), unless--

(A) such regulation, order, or guidance is consistent with section 101;

(B) such regulation, order, or guidance does not add to the requirements of such section; and

(C) such agency finds, in connection with the issuance of such regulation, order, or guidance, that--

(i) there is a substantial justification for the regulation, order, or guidance;

(ii) the methods selected to carry out that purpose--

(I) are substantially equivalent to the requirements imposed on records that are not electronic records; and

(II) will not impose unreasonable costs on the acceptance and use of electronic records; and

(iii) the methods selected to carry out that purpose do not require, or accord greater legal status or effect to, the implementation or application of a specific technology or technical specification for performing the functions of creating, storing, generating, receiving, communicating, or authenticating electronic records or electronic signatures.

(3) PERFORMANCE STANDARDS-

(A) ACCURACY, RECORD INTEGRITY, ACCESSIBILITY- Notwithstanding paragraph (2)(C)(iii), a Federal regulatory agency or State regulatory agency may interpret section 101(d) to specify performance standards to assure accuracy, record integrity, and accessibility of records that are required to be retained. Such performance standards may be specified in a manner that imposes a requirement in violation of paragraph (2)(C)(iii) if the requirement (i) serves an important governmental objective; and (ii) is substantially related to the achievement of that objective. Nothing in this paragraph shall be construed to grant any Federal regulatory agency or State regulatory agency authority to require use of a particular type of software or hardware in order to comply with section 101(d).

(B) PAPER OR PRINTED FORM- Notwithstanding subsection (c)(1), a Federal regulatory agency or State regulatory agency may interpret section 101(d) to require retention of a record in a tangible printed or paper form if--

(i) there is a compelling governmental interest relating to law enforcement or national security for imposing such requirement; and

(ii) imposing such requirement is essential to attaining such interest.

(4) EXCEPTIONS FOR ACTIONS BY GOVERNMENT AS MARKET PARTICIPANT- Paragraph (2)(C)(iii) shall not apply to the statutes, regulations, or other rules of law governing procurement by the Federal or any State government, or

any agency or instrumentality thereof.

(c) ADDITIONAL LIMITATIONS-

(1) REIMPOSING PAPER PROHIBITED- Nothing in subsection (b) (other than paragraph (3)(B) thereof) shall be construed to grant any Federal regulatory agency or State regulatory agency authority to impose or reimpose any requirement that a record be in a tangible printed or paper form.

(2) CONTINUING OBLIGATION UNDER GOVERNMENT PAPERWORK ELIMINATION ACT- Nothing in subsection (a) or (b) relieves any Federal regulatory agency of its obligations under the Government Paperwork Elimination Act (title XVII of Public Law 105-277).

(d) AUTHORITY TO EXEMPT FROM CONSENT PROVISION-

(1) IN GENERAL- A Federal regulatory agency may, with respect to matter within its jurisdiction, by regulation or order issued after notice and an opportunity for public comment, exempt without condition a specified category or type of record from the requirements relating to consent in section 101(c) if such exemption is necessary to eliminate a substantial burden on electronic commerce and will not increase the material risk of harm to consumers.

(2) PROSPECTUSES- Within 30 days after the date of enactment of this Act, the Securities and Exchange Commission shall issue a regulation or order pursuant to paragraph (1) exempting from section 101(c) any records that are required to be provided in order to allow advertising, sales literature, or other information concerning a security issued by an investment company that is registered under the Investment Company Act of 1940, or concerning the issuer thereof, to be excluded from the definition of a prospectus under section 2(a)(10)(A) of the Securities Act of 1933.

(e) ELECTRONIC LETTERS OF AGENCY- The Federal Communications Commission shall not hold any contract for telecommunications service or letter of agency for a preferred carrier change, that otherwise complies with the Commission's rules, to be legally ineffective, invalid, or unenforceable solely because an electronic record or electronic signature was used in its formation or authorization.

SEC. 105. STUDIES.

(a) DELIVERY- Within 12 months after the date of the enactment of this Act, the Secretary of Commerce shall conduct an inquiry regarding the effectiveness of the delivery of electronic records to consumers using electronic mail as compared with delivery of written records via the United States Postal Service and private express mail services. The Secretary shall submit a report to the Congress regarding the results of such inquiry by the conclusion of such 12-month period.

(b) STUDY OF ELECTRONIC CONSENT- Within 12 months after the date of the enactment of this Act, the Secretary of Commerce and the Federal Trade Commission shall

submit a report to the Congress evaluating any benefits provided to consumers by the procedure required by section 101(c)(1)(C)(ii); any burdens imposed on electronic commerce by that provision; whether the benefits outweigh the burdens; whether the absence of the procedure required by section 101(c)(1)(C)(ii) would increase the incidence of fraud directed against consumers; and suggesting any revisions to the provision deemed appropriate by the Secretary and the Commission. In conducting this evaluation, the Secretary and the Commission shall solicit comment from the general public, consumer representatives, and electronic commerce businesses.

SEC. 106. DEFINITIONS.

For purposes of this title:

(1) CONSUMER- The term `consumer' means an individual who obtains, through a transaction, products or services which are used primarily for personal, family, or household purposes, and also means the legal representative of such an individual.

(2) ELECTRONIC- The term `electronic' means relating to technology having electrical, digital, magnetic, wireless, optical, electromagnetic, or similar capabilities.

(3) ELECTRONIC AGENT- The term `electronic agent' means a computer program or an electronic or other automated means used independently to initiate an action or respond to electronic records or performances in whole or in part without review or action by an individual at the time of the action or response.

(4) ELECTRONIC RECORD- The term `electronic record' means a contract or other record created, generated, sent, communicated, received, or stored by electronic means.

(5) ELECTRONIC SIGNATURE- The term `electronic signature' means an electronic sound, symbol, or process, attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record.

(6) FEDERAL REGULATORY AGENCY- The term `Federal regulatory agency' means an agency, as that term is defined in section 552(f) of title 5, United States Code.

(7) INFORMATION- The term `information' means data, text, images, sounds, codes, computer programs, software, databases, or the like.

(8) PERSON- The term `person' means an individual, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, governmental agency, public corporation, or any other legal or commercial entity.

(9) RECORD- The term `record' means information that is inscribed on a tangible medium or that is stored in an electronic or other medium and is retrievable in perceivable form.

(10) REQUIREMENT- The term `requirement' includes a prohibition.

(11) SELF-REGULATORY ORGANIZATION- The term `self-regulatory organization' means an organization or entity that is not a Federal regulatory agency or a State, but that is under the supervision of a Federal regulatory agency and is authorized under Federal law to adopt and administer rules applicable to its members that are enforced by such organization or entity, by a Federal regulatory agency, or by another self-regulatory organization.

(12) STATE- The term `State' includes the District of Columbia and the territories and possessions of the United States.

(13) TRANSACTION- The term `transaction' means an action or set of actions relating to the conduct of business, consumer, or commercial affairs between two or more persons, including any of the following types of conduct--

(A) the sale, lease, exchange, licensing, or other disposition of (i) personal property, including goods and intangibles, (ii) services, and (iii) any combination thereof; and

(B) the sale, lease, exchange, or other disposition of any interest in real property, or any combination thereof.

SEC. 107. EFFECTIVE DATE.

(a) IN GENERAL- Except as provided in subsection (b), this title shall be effective on October 1, 2000.

(b) EXCEPTIONS-

(1) RECORD RETENTION-

(A) IN GENERAL- Subject to subparagraph (B), this title shall be effective on March 1, 2001, with respect to a requirement that a record be retained imposed by--

(i) a Federal statute, regulation, or other rule of law, or

(ii) a State statute, regulation, or other rule of law administered or promulgated by a State regulatory agency.

(B) DELAYED EFFECT FOR PENDING RULEMAKINGS- If on March 1, 2001, a Federal regulatory agency or State regulatory agency has announced, proposed, or initiated, but not completed, a rulemaking proceeding to prescribe a regulation under section 104(b)(3) with respect to a requirement described in subparagraph (A), this title shall be effective on June 1, 2001, with respect to such requirement.

(2) CERTAIN GUARANTEED AND INSURED LOANS- With regard to any transaction involving a loan guarantee or loan guarantee commitment (as those terms are defined in section 502 of the Federal Credit Reform Act of 1990), or involving a program listed in the Federal Credit Supplement, Budget of the United States, FY

2001, this title applies only to such transactions entered into, and to any loan or mortgage made, insured, or guaranteed by the United States Government thereunder, on and after one year after the date of enactment of this Act.

(3) STUDENT LOANS- With respect to any records that are provided or made available to a consumer pursuant to an application for a loan, or a loan made, pursuant to title IV of the Higher Education Act of 1965, section 101(c) of this Act shall not apply until the earlier of--

(A) such time as the Secretary of Education publishes revised promissory notes under section 432(m) of the Higher Education Act of 1965; or

(B) one year after the date of enactment of this Act.

TITLE II--TRANSFERABLE RECORDS

SEC. 201. TRANSFERABLE RECORDS.

(a) DEFINITIONS- For purposes of this section:

(1) TRANSFERABLE RECORD- The term `transferable record' means an electronic record that--

(A) would be a note under Article 3 of the Uniform Commercial Code if the electronic record were in writing;

(B) the issuer of the electronic record expressly has agreed is a transferable record; and

(C) relates to a loan secured by real property.

A transferable record may be executed using an electronic signature.

(2) OTHER DEFINITIONS- The terms `electronic record', `electronic signature', and `person' have the same meanings provided in section 106 of this Act.

(b) CONTROL- A person has control of a transferable record if a system employed for evidencing the transfer of interests in the transferable record reliably establishes that person as the person to which the transferable record was issued or transferred.

(c) CONDITIONS- A system satisfies subsection (b), and a person is deemed to have control of a transferable record, if the transferable record is created, stored, and assigned in such a manner that--

(1) a single authoritative copy of the transferable record exists which is unique, identifiable, and, except as otherwise provided in paragraphs (4), (5), and (6), unalterable;

(2) the authoritative copy identifies the person asserting control as--

(A) the person to which the transferable record was issued; or

(B) if the authoritative copy indicates that the transferable record has been transferred, the person to which the transferable record was most recently transferred;

(3) the authoritative copy is communicated to and maintained by the person asserting control or its designated custodian;

(4) copies or revisions that add or change an identified assignee of the authoritative copy can be made only with the consent of the person asserting control;

(5) each copy of the authoritative copy and any copy of a copy is readily identifiable as a copy that is not the authoritative copy; and

(6) any revision of the authoritative copy is readily identifiable as authorized or unauthorized.

(d) STATUS AS HOLDER- Except as otherwise agreed, a person having control of a transferable record is the holder, as defined in section 1-201(20) of the Uniform Commercial Code, of the transferable record and has the same rights and defenses as a holder of an equivalent record or writing under the Uniform Commercial Code, including, if the applicable statutory requirements under section 3-302(a), 9-308, or revised section 9-330 of the Uniform Commercial Code are satisfied, the rights and defenses of a holder in due course or a purchaser, respectively. Delivery, possession, and endorsement are not required to obtain or exercise any of the rights under this subsection.

(e) OBLIGOR RIGHTS- Except as otherwise agreed, an obligor under a transferable record has the same rights and defenses as an equivalent obligor under equivalent records or writings under the Uniform Commercial Code.

(f) PROOF OF CONTROL- If requested by a person against which enforcement is sought, the person seeking to enforce the transferable record shall provide reasonable proof that the person is in control of the transferable record. Proof may include access to the authoritative copy of the transferable record and related business records sufficient to review the terms of the transferable record and to establish the identity of the person having control of the transferable record.

(g) UCC REFERENCES- For purposes of this subsection, all references to the Uniform Commercial Code are to the Uniform Commercial Code as in effect in the jurisdiction the law of which governs the transferable record.

SEC. 202. EFFECTIVE DATE.

This title shall be effective 90 days after the date of enactment of this Act.

TITLE III--PROMOTION OF INTERNATIONAL ELECTRONIC COMMERCE

SEC. 301. PRINCIPLES GOVERNING THE USE OF ELECTRONIC SIGNATURES IN INTERNATIONAL TRANSACTIONS.

(a) PROMOTION OF ELECTRONIC SIGNATURES-

(1) REQUIRED ACTIONS- The Secretary of Commerce shall promote the acceptance and use, on an international basis, of electronic signatures in accordance with the principles specified in paragraph (2) and in a manner consistent with section 101 of this Act. The Secretary of Commerce shall take all actions necessary in a manner consistent with such principles to eliminate or reduce, to the maximum extent possible, the impediments to commerce in electronic signatures, for the purpose of facilitating the development of interstate and foreign commerce.

(2) PRINCIPLES- The principles specified in this paragraph are the following:

(A) Remove paper-based obstacles to electronic transactions by adopting relevant principles from the Model Law on Electronic Commerce adopted in 1996 by the United Nations Commission on International Trade Law.

(B) Permit parties to a transaction to determine the appropriate authentication technologies and implementation models for their transactions, with assurance that those technologies and implementation models will be recognized and enforced.

(C) Permit parties to a transaction to have the opportunity to prove in court or other proceedings that their authentication approaches and their transactions are valid.

(D) Take a nondiscriminatory approach to electronic signatures and authentication methods from other jurisdictions.

(b) CONSULTATION- In conducting the activities required by this section, the Secretary shall consult with users and providers of electronic signature products and services and other interested persons.

(c) DEFINITIONS- As used in this section, the terms `electronic record' and `electronic signature' have the same meanings provided in section 106 of this Act.

TITLE IV--COMMISSION ON ONLINE CHILD PROTECTION

SEC. 401. AUTHORITY TO ACCEPT GIFTS.

Section 1405 of the Child Online Protection Act (47 U.S.C. 231 note) is amended by inserting after subsection (g) the following new subsection:

`(h) GIFTS, BEQUESTS, AND DEVISES- The Commission may accept, use, and dispose of gifts, bequests, or devises of services or property, both real (including the use of office space) and personal, for the purpose of aiding or facilitating the work of the Commission. Gifts or grants not used at the termination of the Commission shall be returned to the donor or grantee.'.

Speaker of the House of Representatives.

Vice President of the United States and

President of the Senate.

END

UNIFORM ELECTRONIC TRANSACTIONS ACT

Drafted by the

NATIONAL CONFERENCE OF COMMISSIONERS

ON UNIFORM STATE LAWS

and by it

APPROVED AND RECOMMENDED FOR ENACTMENT
IN ALL THE STATES

at its

ANNUAL CONFERENCE
MEETING IN ITS ONE-HUNDRED-AND-EIGHTH YEAR
IN DENVER, COLORADO
JULY 23 – 30, 1999

WITH DRAFT PREFATORY NOTE AND COMMENTS DATED 12-13-99

The ideas and conclusions set forth in the draft prefatory notes and comments have not been passed on by the National Conference of Commissioners on Uniform State Laws. They have been drafted by the Reporter and must be approved by the Chair of the Drafting Committee and the National Conference of Commissioners on Uniform State Laws.

12/15/99

UNIFORM ELECTRONIC TRANSACTIONS ACT (1999)

The Committee that acted for the National Conference of Commissioners on Uniform State Laws in preparing the Uniform Electronic Transactions Act (1999) was as follows:

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UNIFORM ELECTRONIC TRANSACTIONS ACT

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DRAFT PREFATORY NOTES

With the advent of electronic means of communication and information transfer, business models and methods for doing business have evolved to take advantage of the speed, efficiencies, and cost benefits of electronic technologies. These developments have occurred in the face of existing legal barriers to the legal efficacy of records and documents which exist solely in electronic media. Whether the legal requirement that information or an agreement or contract must be contained or set forth in a pen and paper writing derives from a statute of frauds affecting the enforceability of an agreement, or from a record retention statute that calls for keeping the paper record of a transaction, such legal requirements raise real barriers to the effective use of electronic media.

One striking example of electronic barriers involves so called check retention statutes in every state. A study conducted by the Federal Reserve Bank of Boston identified more than 2500 different state laws which require the retention of canceled checks by the issuers of those checks. These requirements not only impose burdens on the issuers, but also effectively restrain the ability of banks handling the checks to automate the process. Although check truncation is validated under the Uniform Commercial Code, if the bank's customer must store the canceled paper check, the bank will not be able to deal with the item through electronic transmission of the information. By establishing the equivalence of an electronic record of the information, the UETA removes these barriers without affecting the underlying legal rules and requirements.

A. Scope of the Act and Procedural Approach. The scope of this Act provides coverage which sets forth a clear framework for covered transactions, and also avoids unwarranted surprises for unsophisticated parties dealing in this relatively new media. The clarity and certainty of the scope of the Act have been obtained while still providing a solid legal framework that allows for the continued development of innovative technology to facilitate electronic transactions.

With regard to the general scope of the Act, the Act's coverage is inherently limited by the definition of "transaction." The Act does not apply to *all* writings and signatures, but only to electronic records and signatures relating to a transaction, defined as those interactions between people relating to business, commercial and governmental affairs. In general, there are few writing or signature requirements imposed by law on many of the "standard" transactions that had been considered for exclusion. A good example relates to trusts, where the general rule on creation of a trust imposes no formal writing requirement. Further, the writing requirements in other contexts derived from governmental filing issues. For example, real estate transactions were considered potentially troublesome because of the need to file a deed or other instrument for protection against third parties. Since the efficacy of a real estate purchase contract, or even a deed, between the parties is not affected by any sort of filing, the question was raised why these transactions should not be validated by this Act if done via an electronic medium. No sound reason was found. Filing requirements fall within Sections 17-19 on governmental records. An exclusion of all real estate transactions would be particularly unwarranted in the event that a state

chose to convert to an electronic recording system, as many have for Article 9 financing statement filings under the Uniform Commercial Code.

The exclusion of specific Articles of the Uniform Commercial Code reflects the recognition that, particularly in the case of Articles 5, 8 and revised Article 9, electronic transactions were addressed in the specific contexts of those revision processes. In the context of Articles 2 and 2A the UETA provides the vehicle for assuring that such transactions may be accomplished and effected via an electronic medium. At such time as Articles 2 and 2A are revised the extent of coverage in those Articles/Acts may make application of this Act as a gap-filling law desirable. Similar considerations apply to the recently promulgated Uniform Computer Information Transactions Act ("UCITA").

The need for certainty as to the scope and applicability of this Act is critical, and makes any sort of a broad, general exception based on notions of inconsistency with existing writing and signature requirements unwise at best. The uncertainty inherent in leaving the applicability of the Act to judicial construction of this Act with other laws is unacceptable if electronic transactions are to be facilitated.

Finally, recognition that the paradigm for the Act involves two willing parties conducting a transaction electronically, makes it was necessary to expressly provide that some form of acquiescence or intent on the part of a person to conduct transactions electronically is necessary before the Act can be invoked. Accordingly, Section 5 specifically provides that the Act only applies between parties that have agreed to conduct transactions electronically. In this context, the construction of the term agreement must be broad in order to assure that the Act applies whenever the circumstances show the parties intention to transact electronically, regardless of whether the intent rises to the level of a formal agreement.

B. Procedural Approach. Another fundamental premise of the Act is that it be minimalist and procedural. The general efficacy of existing law, in an electronic context, so long as biases and barriers to the medium are removed, confirms this approach. The Act defers to existing substantive law. Specific areas of deference to other law in this Act include: 1) the meaning and effect of "sign" under existing law, 2) the method and manner of displaying, transmitting and formatting information in section 8, 3) rules of attribution in section 9, and 4) the law of mistake in section 10.

The Act's treatment of records and signatures demonstrates best the minimalist approach that has been adopted. Whether a record is attributed to a person is left to law outside this Act. Whether an electronic signature has any effect is left to the surrounding circumstances and other law. These provisions are salutary directives to assure that records and signatures will be treated in the same manner, under currently existing law, as written records and manual signatures.

The deference of the Act to other substantive law does not negate the necessity of setting forth rules and standards for using electronic media. The Act expressly validates electronic records, signatures and contracts. It provides for the use of electronic records and information for retention purposes, providing certainty in an area with great potential in cost savings and efficiency. The Act makes clear that the actions of machines ("electronic agents") programmed and used by people will bind the user of the machine, regardless of whether human review of a

particular transaction has occurred. It specifies the standards for sending and receipt of electronic records, and it allows for innovation in financial services through the implementation of transferable records. In these ways the Act permits electronic transactions to be accomplished with certainty under existing substantive rules of law.

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UNIFORM ELECTRONIC TRANSACTIONS ACT

SECTION 1. SHORT TITLE. This [Act] may be cited as the Uniform Electronic Transactions Act.

SECTION 2. DEFINITIONS. In this [Act]:

(1) "Agreement" means the bargain of the parties in fact, as found in their language or inferred from other circumstances and from rules, regulations, and procedures given the effect of agreements under laws otherwise applicable to a particular transaction.

(2) "Automated transaction" means a transaction conducted or performed, in whole or in part, by electronic means or electronic records, in which the acts or records of one or both parties are not reviewed by an individual in the ordinary course in forming a contract, performing under an existing contract, or fulfilling an obligation required by the transaction.

(3) "Computer program" means a set of statements or instructions to be used directly or indirectly in an information processing system in order to bring about a certain result.

(4) "Contract" means the total legal obligation resulting from the parties' agreement as affected by this [Act] and other applicable law.

(5) "Electronic" means relating to technology having electrical, digital, magnetic, wireless, optical, electromagnetic, or similar capabilities.

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

(7) "Electronic record" means a record created, generated, sent, communicated, received, or stored by electronic means.

(8) "Electronic signature" means an electronic sound, symbol, or process attached to or logically associated with a record and executed or adopted by a person with the intent to sign the record.

(9) " Governmental agency" means an executive, legislative, or judicial agency, department, board, commission, authority, institution, or instrumentality of the federal government or of a State or of a county, municipality, or other political subdivision of a State.

(10) "Information" means data, text, images, sounds, codes, computer programs, software, databases, or the like.

(11) "Information processing system" means an electronic system for creating, generating, sending, receiving, storing, displaying, or processing information.

(12) "Person" means an individual, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, governmental agency, public corporation, or any other legal or commercial entity.

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

(14) "Security procedure" means a procedure employed for the purpose of verifying that an electronic signature, record, or performance is that of a specific person or for detecting changes or errors in the information in an electronic record. The term includes a procedure that

requires the use of algorithms or other codes, identifying words or numbers, encryption, or callback or other acknowledgment procedures.

(15) "State" means a State of the United States, the District of Columbia, Puerto Rico, the United States Virgin Islands, or any territory or insular possession subject to the jurisdiction of the United States. The term includes an Indian tribe or band, or Alaskan native village, which is recognized by federal law or formally acknowledged by a State.

(16) "Transaction" means an action or set of actions occurring between two or more persons relating to the conduct of business, commercial, or governmental affairs.

Sources: UNICTRAL Model Law on Electronic Commerce; Uniform Commercial Code; Uniform Computer Information Transactions Act; Restatement 2d Contracts.

DRAFT COMMENTS

1. **"Agreement"**

Whether the parties have reached an agreement is determined by their express language and all surrounding circumstances. The Restatement of Contracts 2d §3 provides that, "An agreement is a manifestation of mutual assent on the part of two or more persons." See also Restatement of Contracts 2d, Section 2, Comment b. The Uniform Commercial Code specifically includes in the circumstances from which an agreement may be inferred "course of performance, course of dealing and usage of trade..." as defined in the UCC. Although the definition of agreement in this Act does not make specific reference to usage of trade and other party conduct, this definition is not intended to affect the construction of the parties' agreement under the substantive law applicable to a particular transaction. Where that law takes account of usage and conduct in informing the terms of the parties' agreement, the usage or conduct would be relevant as "other circumstances" included in the definition under this Act.

Where the law applicable to a given transaction provides that system rules and the like constitute part of the agreement of the parties, such rules will have the same effect in determining the parties agreement under this Act. For example, UCC Article 4 (Section 4-103(b)) provides that Federal Reserve regulations and operating circulars and clearinghouse rules have the effect of agreements. Such agreements by law properly would be included in the definition of agreement in this Act.

The parties' agreement is relevant in determining whether the provisions of this Act have been varied by agreement. In addition, the parties' agreement may establish the parameters of the parties' use of electronic records and signatures, security procedures and similar aspects of the

transaction. See Model Trading Partner Agreement, 45 Business Lawyer Supp. Issue (June 1990). See Section 5(b) and comments thereto.

2. "Automated Transaction."

This definition addresses the use and effectiveness of machines beyond the issue of contract formation and deals with performances under a contract and other obligations accomplished by electronic means in a transaction. Such a broad application is necessary because of the diversity of transactions to which this Act may apply.

As with electronic agents, this definition addresses the circumstance where electronic records may result in action or performance by a party although no human review of the electronic records is anticipated. Section 14 provides specific rules to assure that where one or both parties do not review the electronic records, the resulting agreement will be effective.

The critical element in this definition is the lack of a human actor on one or both sides of a transaction. For example, if one orders books from Bookseller.com through Bookseller's website, the transaction would be an automated transaction because Bookseller took and confirmed the order via its machine. Similarly, if Automaker and supplier do business through Electronic Data Interchange, Automaker's computer, upon receiving information within certain pre-programmed parameters, will send an electronic order to supplier's computer. If Supplier's computer confirms the order and processes the shipment because the order falls within pre-programmed parameters in Supplier's computer, this would be a fully automated transaction. If, instead, the Supplier relies on a human employee to review, accept, and process the Buyer's order, then only the Automaker's side of the transaction would be automated. In either case, the entire transaction falls within this definition.

3. **"Computer program."** This definition refers to the functional and operating aspects of an electronic, digital system. It relates to operating instructions used in an electronic system such as an electronic agent. (See definition of "Electronic Agent").

4. **"Electronic."** The basic nature of most current technologies and the need for a recognized, single term warrants the use of "electronic" as the defined term. The definition is intended to assure that the Act will be applied broadly as new technologies develop. The term must be construed broadly in light of developing technologies in order to fulfill the purpose of this Act to validate commercial transactions regardless of the medium used by the parties. Current legal requirements for "writings" can be satisfied by most any tangible media, whether paper, other fibers, or even stone. The purpose and applicability of this Act covers intangible media which are technologically capable of storing, transmitting and reproducing information in human perceivable form, but which lack the tangible aspect of paper, papyrus or stone.

While not all technologies listed are technically "electronic" in nature (e.g., optical fiber technology), the term "electronic" is the most descriptive term available to describe the majority of current technologies. For example, the development of biological and chemical processes for communication and storage of data, while not specifically mentioned in the definition, are included

within the technical definition because such processes operate on electromagnetic impulses. However, whether a particular technology may be characterized as technically “electronic,” i.e., operates on electromagnetic impulses, should not be determinative of whether records and signatures created, used and stored by means of a particular technology are covered by this Act. This act is intended to apply to all records and signatures created, used and stored by any medium which permits the information to be retrieved in perceivable form.

5. **"Electronic agent."** This definition establishes that an electronic agent is a machine. As the term “electronic agent” has come to be recognized, it is limited to a tool function. The effect on the party using the agent is addressed in the operative provisions of the Act (e.g., Section 14)

An electronic agent, such as a computer program or other automated means employed by a person, is a tool of that person. As a general rule, the employer of a tool is responsible for the results obtained by the use of that tool since the tool has no independent volition of its own. However, an electronic agent, by definition, is capable within the parameters of its programming, of initiating, responding or interacting with other parties or their electronic agents once it has been activated by a party, without further attention of that party.

While this Act proceeds on the paradigm that an electronic agent is capable of performing only within the technical strictures of its preset programming, it is conceivable that, within the useful life of this Act, electronic agents may be created with the ability to act autonomously, and not just automatically. That is, through developments in artificial intelligence, a computer may be able to "learn through experience, modify the instructions in their own programs, and even devise new instructions." Allen and Widdison, "Can Computers Make Contracts?" *9 Harv. J.L.&Tech 25* (Winter, 1996). If such developments occur, courts may construe the definition of electronic agent accordingly, in order to recognize such new capabilities.

The examples involving Bookseller.com and Automaker in the comment to the definition of Automated Transaction are equally applicable here. Bookseller acts through an electronic agent in processing an order for books. Automaker and the supplier each act through electronic agents in facilitating and effectuating the just-in-time inventory process through EDI.

6. **"Electronic record."** An electronic record is a subset of the broader defined term "record." It is any record created, used or stored in a medium other than paper (see definition of electronic). The defined term is also used in this Act as a limiting definition in those provisions in which it is used.

Information processing systems, computer equipment and programs, electronic data interchange, electronic mail, voice mail, facsimile, telex, telecopying, scanning, and similar technologies all qualify as electronic under this act. Accordingly information stored on a computer hard drive or floppy disc, facsimiles, voice mail messages, messages on a telephone answering machine, audio and video tape recordings, among other records, all would be electronic records under this Act.

7. **"Electronic signature."**

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The idea of a signature is broad and not specifically defined. Whether any particular record is "signed" is a question of fact. Proof of that fact must be made under other applicable law. This act simply assures that the signature may be accomplished through an electronic means. No specific technology need be used in order to create a valid signature. One's voice on an answering machine may suffice if the requisite intention is present. Similarly, including one's name as part of an electronic mail communication also may suffice, as may the firm name on a facsimile. It also may be shown that the requisite intent was not present and accordingly the symbol, sound or process did not amount to a signature. One may use a digital signature with the requisite intention, or one may use the private key solely as an access device with no intention to sign, or otherwise accomplish a legally binding act. In any case the critical element is the intention to execute or adopt the sound or symbol or process for the purpose of signing the related record.

The definition requires that the signer execute or adopt the sound, symbol, or process with the intent to sign the record. The act of applying a sound, symbol or process to an electronic record could have differing meanings and effects. The consequence of the act and the effect of the act as a signature are determined under other applicable law. However, the essential attribute of a signature involves applying a sound, symbol or process with an intent to do a legally significant act. It is that intention that is understood in the law as a part of the word "sign", without the need for a definition.

This Act establishes, to the greatest extent possible, the equivalency of electronic signatures and manual signatures. The purpose is to overcome unwarranted biases against electronic methods of signing and authenticating records. Therefore the term "signature" has been used to connote and convey that equivalency. The term "authentication," used in other laws, often has a narrower meaning and purpose than an electronic signature as used in this Act. However, an authentication under any of those other laws constitutes an electronic signature under this Act.

The precise effect of an electronic signature will be determined based on the surrounding circumstances under section 9(b).

This definition includes as an electronic signature the standard webpage click through process. For example, when a person orders goods or services through a vendor's website, the person will be required to provide information as part of a process which will result in receipt of the goods or services. When the customer ultimately gets to the last step and clicks "I agree," the person has adopted the process and has done so with the intent to associate the person with the record of that process. The actual effect of the electronic signature will be determined from all the surrounding circumstances, however, the person adopted a process which the circumstances indicate s/he intended to have the effect of getting the goods/services and being bound to pay for them. The adoption of the process carried the intent to do a legally significant act, the hallmark of a signature.

Another important aspect of this definition lies in the necessity that the electronic signature be linked or logically associated with the record. In the paper world, it is assumed that the symbol adopted by a party is attached to or located somewhere in the same paper that is intended to be authenticated, e.g., an allonge firmly attached to a promissory note, or the classic signature at the

end of a long contract. These tangible manifestations do not exist in the electronic environment, and accordingly, this definition expressly provides that the symbol must in some way be linked to, or connected with, the electronic record being signed. This linkage is consistent with the regulations promulgated by the Food and Drug Administration. 21 CFR Part 11 (March 20, 1997).

A digital signature using public key encryption technology would qualify as an electronic signature, as would the mere inclusion of one's name as a part of an e-mail message - so long as in each case the signer executed or adopted the symbol with the intent to sign.

8. **"Governmental agency."**

This definition is important in the context of optional Sections 17-19.

9. **"Information processing system."** This definition is consistent with the UNCITRAL Model Law on Electronic Commerce. The term includes computers and other information systems. It is principally used in Section 15 in connection with the sending and receiving of information. In that context, the key aspect is that the information enter a system from which a person can access it.

10. **"Record."** This is a standard definition designed to embrace all means of communicating or storing information except human memory. It includes any method for storing or communicating information, including "writings." A record need not be indestructible or permanent, but the term does not include oral or other communications which are not stored or preserved by some means. Information that has not been retained other than through human memory does not qualify as a record. As in the case of the terms "writing" or "written," the term "record" does not establish the purposes, permitted uses or legal effect which a record may have under any particular provision of substantive law. ABA Report on Use of the Term "Record," October 1, 1996.

11. **"Security procedure."**

A security procedure may be applied to verify an electronic signature, verify the identity of the sender, or assure the informational integrity of an electronic record. The definition does not identify any particular technology. This permits the use of procedures which the parties select or which are established by law. It permits the greatest flexibility among the parties and allows for future technological development.

The definition is this Act is broad and is used to illustrate one way of establishing attribution or content integrity of an electronic record or signature. The use of a security procedure is not accorded operative legal effect, through the use of presumptions or otherwise, by this Act. In this Act, the use of security procedures is simply one method for proving the source or content of an electronic record or signature.

A security procedure may be technologically very sophisticated, such as an asymetric cryptographic system. At the other extreme the security procedure may be as simple as a telephone call to confirm the identity of the sender through another channel of communication. It

may include the use of a mother's maiden name or a personal identification number (PIN). Each of these examples is a method for confirming the identity of a person or accuracy of a message.

12. **"Transaction."** The definition has been limited to actions between people taken in the context of business, commercial or governmental activities. The term includes all interactions between people for business, commercial, including specifically consumer, or governmental purposes. However, the term does not include unilateral or non-transactional actions. As such it provides a structural limitation on the Scope of the Act as stated in the next section.

It is essential that the term commerce and business be understood and construed broadly to include commercial and business transactions involving individuals who may qualify as "consumers" under other applicable law. If Alice and Bob agree to the sale of Alice's car to Bob for $2000 using an internet auction site, that transaction is fully covered by this Act. Even if Alice and Bob each qualify as typical "consumers," under other applicable law, their interaction was a transaction in commerce. Accordingly their actions would be related to commercial affairs, and fully qualify as a transaction governed by this Act.

Other transaction types may include:

1. A single purchase by an individual from a retail merchant, which may be accomplished by an order sent by facsimile from a printed catalog, or by exchange of electronic mail;

2. Recurring orders on a weekly or monthly basis between large companies which have entered into a master trading partner agreement to govern the methods and manner of their transaction parameters;

3. A purchase by an individual from an online internet retail vendor. Such an arrangement may develop into an ongoing series of individual purchases, with security procedures and the like, as a part of doing ongoing business.

4. The closing of a business purchase transaction via facsimile transmission of documents or even electronic mail. In such a transaction, all parties may participate through electronic conferencing technologies. At the appointed time all electronic records are executed electronically and transmitted to the other party. In such a case, the electronic records and electronic signatures are validated under this Act, obviating the need for " in person" closings.

A transaction must include interaction between two or more persons. Accordingly, the execution of a will or trust, or the execution of a health care power of attorney or similar health care designation, for example, would not be covered by this Act because they are not a part of a transaction as defined in this Act.

SECTION 3. SCOPE.

(a) Except as otherwise provided in subsection (b), this [Act] applies to electronic records and electronic signatures relating to a transaction.

(b) This [Act] does not apply to a transaction to the extent it is governed by:

(1) a law governing the creation and execution of wills, codicils, or testamentary trusts;

(2) [The Uniform Commercial Code other than Sections 1-107 and 1-206, Article 2, and Article 2A];

(3) [the Uniform Computer Information Transactions Act]; and

(4) [other laws, if any, identified by State].

(c) This [Act] applies to an electronic record or electronic signature otherwise excluded from the application of this [Act] under subsection (b) to the extent it is governed by a law other than those specified in subsection (b).

(d) A transaction subject to this [Act] is also subject to other applicable substantive law.

SEE LEGISLATIVE NOTE BELOW - FOLLOWING DRAFT COMMENTS.

DRAFT COMMENTS

1. The Scope of this Act is inherently limited by the fact that it only applies to transactions related to business, commercial (including consumer) and governmental matters. Consequently, transactions with no relation to business, commercial or governmental transactions would not be subject to this Act. Unilaterally generated electronic records and signatures which are not part of a transaction also are not covered by this Act. See Section 2, Comment 12.

2. This act affects the medium in which information, records and signatures may be presented and retained under current legal requirements. While this Act covers all electronic records and signatures which are used in a business, commercial (including consumer) or governmental transaction, the operative provisions of the act relate to requirements for writings and signatures under other laws. Accordingly, the exclusions in subsection (b) focus on those legal rules imposing certain writing and signature requirements which will ***not*** be affected by this act.

3. The exclusions listed in subsection (b) provide clarity and certainty regarding the laws which are and are not affected by this Act. This section provides that transactions subject to specific laws are unaffected by this Act and leaves the balance subject to this Act.

4. Paragraph (1) excludes wills, codicils and testamentary trusts. This exclusion is largely salutary given the unilateral context in which such records are generally created and the unlikely use of such records in a transaction as defined in this Act (i.e., actions taken by two or more persons in the context of business, commercial or governmental affairs). Paragraph (2) excludes all of the Uniform Commercial Code other than UCC Section 1-107 and 1-206, and Articles 2 and 2A. This Act does not apply to the excluded UCC articles, whether in "current" or "revised" form.

5. Articles 3, 4 and 4A of the UCC impact payment systems and have specifically been removed from the coverage of this Act. Moreover, the systems affected go well beyond the relationships between contracting parties and require broader attention to systemic effects. Articles 5, 8 and 9 have been excluded because the revision process relating to those Articles included significant consideration of electronic practices. Paragraph 4 provides for exclusion from this Act of UCITA because the drafting process of that Act also included significant consideration of electronic contracting provisions.

6. The very limited application of this Act to Transferable Records in Section 16 does not affect payment systems, and the Section is designed to apply to a transaction through express agreement of the parties. The exclusion of Articles 3 and 4 will not affect the Act's coverage of Transferable Records. Section 16 is designed to allow for the development of systems which will provide "control" as defined in Section 16. Such control is necessary as a substitute for the idea of possession which undergirds negotiable instrument law. The technology has yet to be developed which will allow for the possession of a unique electronic token embodying the rights associated with a negotiable promissory note. Section 16's concept of control is intended as a substitute for possession.

The provisions in Section 16 operate as free standing rules, establishing the rights of parties using Transferable Records *under this Act*. The references in Section 16 to UCC Section 3-302, 7-501 and 9-308 (R9-330(d)) are designed to incorporate the substance of those provisions into this act for the limited purposes noted in section 16(c). Accordingly, an electronic record which is also a Transferable Record, would not be used for purposes of a transaction governed by Articles 3, 4, or 9, but would be an electronic record used for purposes of a transaction governed by Section 16. However, it is important to remember that those UCC Articles will still apply to the transferable record in their own right. Accordingly any other substantive requirements, e.g., method and manner of perfection under Article 9, must be complied with under those other laws. See Comments to Section 16.

7. This Act does apply, *in toto*, to transactions under unrevised Articles 2 and 2A. There is every reason to validate electronic contracting in these situations. Sales and leases do not implicate broad systems such as is the case with payment systems. Further sales and leases generally do not have a far reaching effect on the rights of parties beyond the contracting parties, such as exists in the secured transactions system. Finally, it is in the area of sales, licenses and

leases that electronic commerce is occurring to its greatest extent today. To exclude these transactions would largely gut the purpose of this Act.

In the event that Articles 2 and 2A are revised and adopted in the future, UETA will only apply to the extent provided in those Acts.

8. An electronic record/signature may be used for purposes of more than one legal requirement, or may be covered by more than one law. Consequently, it is important to make clear, despite any apparent redundancy, in subsection (c) that an electronic record used for purposes of a law which is ***not*** affected by this act under subsection (b) may nonetheless be used and validated for purposes of other laws not excluded by subsection (b). For example, this Act does not apply to an electronic record of a check when used for purposes of a transaction governed by Article 4 of the Uniform Commercial Code, i.e., the Act does not validate so-called electronic checks. However, for purposes of check retention statutes, the same electronic record of the check is covered by this Act, so that retention of an electronic image/record of a check will satisfy such retention statutes, so long as the requirements of Section 12 are fulfilled.

In another context, subsection (c) would operate to allow this Act to apply to what would appear to be an excluded transaction under subsection (b). For example, Article 9 of the Uniform Commercial Code applies generally to any transaction that creates a security interest in personal property. However, Article 9 excludes landlord's liens. Accordingly, although this Act excludes from its application transactions subject to Article 9, this Act would apply to the creation of a landlord lien if the law otherwise applicable to landlord's liens did not provide otherwise, because the landlord's lien transaction is excluded from Article 9.

9. Additional exclusions under subparagraph (b)(4) should be limited to laws which govern electronic records and signatures which may be used in transactions as defined in Section 2(16). Records used unilaterally, or which do not relate to business, commercial (including consumer), or governmental affairs are not governed by this Act in any event, and exclusion of laws relating to such records may create unintended inferences about whether other records and signatures are covered by this Act.

It is also important that additional exclusions, if any, be included under subsection(b)(4) in order to assure that continued validation of such records under subsection (c) will occur.

LEGISLATIVE NOTE REGARDING POSSIBLE ADDITIONAL EXCLUSIONS UNDER SECTION 3(b)(4).

The following discussion is derived from the Report dated September 21, 1998 of The Task Force on State Law Exclusions (the "Task Force") presented to the Drafting Committee. After consideration of the Report, the Drafting Committee determined that exclusions other than those specified in the Act were not warranted. In addition, other inherent limitations on the applicability of the act (the definition of transaction, the requirement that the parties acquiesce in the use of an electronic format) also militate against additional exclusions. Nonetheless, the Drafting Committee recognized that some legislatures may wish to exclude additional transactions from the act, and determined that guidance in some major areas would be helpful to those legislatures considering additional areas for exclusion.

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Because of the overwhelming number of references in state law to writings and signatures, the following list of possible transactions is not exhaustive. However, they do represent those areas most commonly raised during the course of the drafting process as areas that might be inappropriate for an electronic medium. It is important to keep in mind however, that the drafting committee determined that exclusion of these additional areas was not warranted.

1. **Trusts** (other than testamentary trusts). Trusts can be used for both business and personal purposes. By virtue of the definition of transaction, trusts used outside the area of business and commerce would not be governed by this Act. With respect to business or commercial trusts, the laws governing their formation contain few or no requirements for paper or signatures. Indeed, in most jurisdictions trusts of any kind may be created orally. Consequently, the drafting committee believed that the Act should apply to any transaction where the law leaves to the parties the decision of whether to use a writing. Thus, in the absence of legal requirements for writings, there is no sound reason to exclude laws governing trusts from the application of this Act.

2. **Powers of Attorney.** A power of attorney is simply a formalized type of agency agreement. In general, no formal requirements for paper or execution were found to be applicable to the validity of powers of attorney.

Special health powers of attorney have been established by statute in some states. These powers may have special requirements under state law regarding execution, acknowledgment and possibly notarization. In the normal case such powers will not arise in a transactional context and so would not be covered by this Act. However, even if such a record were to arise in a transactional context, this act operates simply to remove the barrier to the use of an electronic medium, and preserves other requirements of applicable substantive law, avoiding any necessity to exclude such laws from the operation of this Act. Especially in light of the provisions of Sections 8 and 11, the substantive requirements under such laws will be preserved and may be satisfied in an electronic format.

3. **Real Estate Transactions.** It is important to distinguish between the efficacy of paper documents involving real estate between the parties, as opposed to their effect on third parties. The latter consideration relates to the necessity of governmental filing. As between the parties, it is unnecessary to maintain existing barriers to electronic contracting. There are no unique characteristics to contracts relating to real property as opposed to other business and commercial (including consumer) contracts. Consequently, the decision whether to use an electronic medium for their agreements should be a matter for the parties to determine. In the event notarization and acknowledgment are required under other laws, Section 11 provides a means for such actions to be accomplished electronically.

With respect to the requirements of government filing, those are left to the individual states in the decision of whether to adopt and implement electronic filing systems. (See optional Section 17-19). However, government recording systems currently require paper deeds including notarized, manual signatures. Although California and Illinois are experimenting with electronic filing systems, until such systems become widespread, the parties likely will choose to use, at the least, a paper deed for filing purposes. Nothing in this Act precludes the parties from selecting the medium best suited to the needs of the particular transaction. Parties may wish to consummate

the transaction using electronic media in order to avoid expensive travel. Yet the actual deed may be in paper form to assure compliance with existing recording systems and requirements. The critical point is that nothing in this Act prevents the parties from selecting paper or electronic media for all or part of their transaction.

4. **Consumer Protection Statutes.** Consumer protection provisions in state law often require that information be disclosed or provided to a consumer in writing. Because this act does apply to such transactions, the question of whether such laws should be specifically excluded was considered. Exclusion of consumer transactions would eliminate a huge group of commercial transactions which benefit consumers by enabling the efficiency of the electronic medium. Commerce over the internet is driven by consumer demands and concerns and must be included.

At the same time, it is important to recognize the protective effects of many consumer statutes. Consumer statutes often require that information be provided in writing, or may require that the consumer separately sign or initial a particular provision to evidence that the consumer's attention was brought to the provision. Subsection (1) requires electronic records to be retainable by a person whenever the law requires information to be delivered in writing. The section imposes a significant burden on the sender of information. The sender must be assured that the information system of the recipient is compatible with, and capable of retaining the information sent by, the sender's system. Furthermore, nothing in this Act permits the avoidance of legal requirements of separate signatures or initialing. The Act simply permits the signature or initialing to be done electronically.

Other consumer protection statutes require (expressly or implicitly) that certain information be presented in a certain manner or format. Laws requiring information to be presented in particular fonts, formats or in similar fashion, as well as laws requiring conspicuous displays of information are preserved. Section 8(b)(3) specifically preserves the applicability of such requirements in an electronic environment. In the case of conspicuous requirements, the determination of what is conspicuous will be left to other law. Section 8 was included to specifically preserve the protective functions of such disclosure statutes, while at the same time allowing the use of electronic media if the substantive requirements of the other laws could be satisfied in the electronic medium.

The requirement that both parties agree to conduct a transaction electronically also prevents the imposition of the electronic medium on unwilling parties See Section 5(b). In addition, where the law requires inclusion of specific terms or language, those requirements are preserved broadly by Section 5(e).

Requirements that information be sent to, or received by, someone have been preserved in Section 15. As in the paper world, obligations to send do not impose any duties on the sender to assure receipt, other than reasonable methods of dispatch. In those cases where receipt is required legally, Sections 5, 8 sand 15 impose the burden on the sender to assure delivery to the recipient if satisfaction of the legal requirement is to be fulfilled.

Formatting and separate signing requirements serve a critical purpose in much consumer protection legislation, to assure that information is not slipped past the unsuspecting consumer. Not only does this Act not disturb those requirements, it preserves those requirements. In

addition, other bodies of substantive law continue to operate to allow the courts to police any such bad conduct or overreaching, e.g., unconscionability, fraud, duress, mistake and the like. These bodies of law remain applicable regardless of the medium in which a record appears.

The preservation of existing safeguards, together with the ability to opt out of the electronic medium entirely, demonstrate the lack of any need generally to exclude consumer protection laws from the operation of this Act. Legislatures may wish to focus any review on those statutes which provide for post-contract formation and post-breach notices to be in paper. However, any such consideration must also balance the needed protections against the potential burdens which may be imposed. Consumers and others will not be well served by restrictions which preclude the employment of electronic technologies sought and desired by consumers.

SECTION 4. PROSPECTIVE APPLICATION. This [Act] applies to any electronic record or electronic signature created, generated, sent, communicated, received, or stored on or after the effective date of this [Act].

DRAFT COMMENT

This section makes clear that the Act only applies to validate electronic records and signatures which arise subsequent to the effective date of the act. Whether electronic records and electronic signatures arising before the effective date of this act are valid is left to other law.

SECTION 5. USE OF ELECTRONIC RECORDS AND ELECTRONIC SIGNATURES; VARIATION BY AGREEMENT.

(a) This [Act] does not require a record or signature to be created, generated, sent, communicated, received, stored, or otherwise processed or used by electronic means or in electronic form.

(b) This [Act] applies only to transactions between parties each of which has agreed to conduct transactions by electronic means. Whether the parties agree to conduct a transaction by electronic means is determined from the context and surrounding circumstances, including the parties' conduct.

(c) A party that agrees to conduct a transaction by electronic means may refuse to conduct other transactions by electronic means. The right granted by this subsection may not be waived by agreement.

(d) Except as otherwise provided in this [Act], the effect of any of its provisions may be varied by agreement. The presence in certain provisions of this [Act] of the words "unless otherwise agreed", or words of similar import, does not imply that the effect of other provisions may not be varied by agreement.

(e) Whether an electronic record or electronic signature has legal consequences is determined by this [Act] and other applicable law.

DRAFT COMMENTS

This Section limits the applicability of this Act to transactions which parties have agreed to conduct electronically. Accordingly, a broad interpretation of the term agreement is necessary to assure that this Act has the widest possible application consistent with its purpose of removing barriers to electronic commerce.

1. This section makes clear that this Act is intended to facilitate the use of electronic means, but does not require the use of electronic records and signatures. This fundamental principle is set forth in subsection (a) and elaborated by subsections (b) and (c), which require an intention to conduct transactions electronically and preserve the right of a party to refuse to use electronics in any subsequent transaction.

2. The paradigm of this Act is two willing parties doing transactions electronically. It is therefore appropriate that the Act is voluntary and preserves the greatest possible party autonomy to refuse electronic transactions. The requirement that party agreement be found from all the surrounding circumstances is a limitation on the scope of this Act.

3. If this Act is to serve to facilitate electronic transactions, it must be applicable under circumstances not rising to a full fledged contract to use electronics. While absolute certainty can be accomplished by obtaining an explicit contract before relying on electronic transactions, such an explicit contract should not be necessary before one may feel safe in conducting transactions electronically. Indeed, such a requirement would itself be an unreasonable barrier to electronic commerce, at odds with the fundamental purpose of this Act. Accordingly, the requisite agreement, express or implied, must be determined from all available circumstances and evidence.

4. Subsection (b) provides that the Act applies to transactions in which the parties have agreed to conduct the transaction electronically. In this context it is essential that the parties'

actions and words be broadly construed in determining whether the requisite agreement exists. Accordingly, the Act expressly provides that the party's agreement is to be found from all circumstances, including the parties' conduct. The critical element is the intent of a party to conduct a transaction electronically. Once that intent is established, this Act applies. See Restatement of Contracts 2d, Sections 2, 3 and 19.

Examples of circumstances from which it may be found that parties have reached an agreement to conduct transactions electronically include the following:

EXAMPLES:

A. Automaker and supplier enter into a Trading Partner Agreement setting forth the terms, conditions and methods for the conduct of business between them electronically.

B. Joe gives out his business card with his business e-mail address. It may be reasonable, under the circumstances, for a recipient of the card to infer that Joe has agreed to communicate electronically for business purposes. However, in the absence of additional facts, it would not necessarily be reasonable to infer Joe's agreement to communicate electronically for purposes outside the scope of the business indicated by use of the business card.

C. Sally may have several e-mail addresses - home, main office, office of a non-profit organization on whose board Sally sits. In each case, it may be reasonable to infer that Sally is willing to communicate electronically with respect to business related to the business/purpose associated with the respective e-mail addresses. However, depending on the circumstances, it may not be reasonable to communicate with Sally for purposes other than those related to the purpose for which she maintained a particular e-mail account.

D. Among the circumstances to be considered in finding an agreement would be the time when the assent occurred relative to the timing of the use of electronic communications. If I order books from an on-line vendor, such as Bookseller.com my intention to conduct that transaction and to receive any correspondence related to the transaction, electronically can be inferred from my conduct. Accordingly, as to information related to that transaction it is reasonable for Bookseller to deal with me electronically.

The examples noted above are intended to focus the inquiry on the party's agreement to conduct a transaction electronically. Similarly, if two people are at a meeting and one tells the other to send an e-mail to confirm a transaction - the requisite agreement under subsection (b) would exist. In each case, the use of a business card, statement at a meeting, or other evidence of willingness to conduct a transaction electronically must be viewed in light of all the surrounding circumstances with a view toward broad validation of electronic transactions.

4. Just as circumstances may indicate the existence of agreement, express or implied from surrounding circumstances, circumstances may also demonstrate the absence of true agreement. For example:

A. If Automaker, Inc. were to issue a recall of automobiles via its Internet website, it would not be able to rely on this Act to validate that notice in the case of a person who never logged on to the website, or indeed, had no ability to do so, notwithstanding a clause in a paper purchase contract by which the buyer agreed to receive such notices in such a manner.

B. Buyer executes a standard form contract in which an agreement to receive all notices electronically in set forth on page 3 in the midst of other fine print. Buyer has never communicated with Seller electronically, and has not provided any other information in the contract to suggest a willingness to deal electronically. Not only is it unlikely that any but the most formalistic of agreements may be found, but nothing in this Act prevents courts from policing such form contracts under common law doctrines relating to contract formation, unconscionability and the like.

5. Subsection (c) has been added to make clear the ability of a party to refuse to conduct a transaction electronically, even if the person has conducted transactions electronically in the past. The effectiveness of a party's refusal to conduct a transaction electronically will be determined under other applicable law in light of all surrounding circumstances.

6. Subsection (e) is an essential provision in the overall scheme of this Act. While this Act validates and effectuates electronic records and electronic signatures, the legal effect of such records and signatures is left to existing substantive law outside this Act except in very narrow circumstances. See, e.g., Section 16. Even when this Act operates to validate records and signatures in an electronic medium, it expressly preserves the substantive rules of other law applicable to such records. See, e.g., Section 11.

For example, beyond validation of records, signatures and contracts based on the medium used, Sections 7 (a) and (b) should not be interpreted as establishing the legal effectiveness of any given record, signature or contract. Where a rule of law requires that the record contain minimum substantive content, the legal effect of such a record will depend on whether the record meets the substantive requirements of other applicable law.

Section 8 expressly preserves a number of legal requirements in currently existing law relating to the presentation of information in writing. Although this Act now would allow such information to be presented in an electronic record, Section 8 provides that the other substantive requirements of law must be satisfied in the electronic medium as well.

SECTION 6. CONSTRUCTION AND APPLICATION. This [Act] must be construed and applied:

(1) to facilitate electronic transactions consistent with other applicable law;

(2) to be consistent with reasonable practices concerning electronic transactions and with the continued expansion of those practices; and

(3) to effectuate its general purpose to make uniform the law with respect to the subject of this [Act] among States enacting it.

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DRAFT COMMENTS

1. The purposes and policies of this Act are

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

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

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

d) to permit the continued expansion of commercial and governmental electronic practices through custom, usage 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.

2. This Act has been drafted to permit flexible application consistent with its purpose to validate electronic transactions. The provisions of this Act validating and effectuating the employ of electronic media allow the courts to apply them to new and unforeseen technologies and practices. As time progresses, it is anticipated that what is new and unforeseen today will be commonplace tomorrow. Accordingly, this legislation is intended to set a framework for the validation of media which may be developed in the future and which demonstrate the same qualities as the electronic media contemplated and validated under this Act.

SECTION 7. LEGAL RECOGNITION OF ELECTRONIC RECORDS, ELECTRONIC SIGNATURES, AND ELECTRONIC CONTRACTS.

(a) A record or signature may not be denied legal effect or enforceability solely because it is in electronic form.

(b) A contract may not be denied legal effect or enforceability solely because an electronic record was used in its formation.

(c) If a law requires a record to be in writing, an electronic record satisfies the law.

(d) If a law requires a signature, an electronic signature satisfies the law.

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Source: UNCITRAL Model Law on Electronic Commerce, Articles 5, 6, and 7.

DRAFT COMMENTS

1. This section sets forth the fundamental premise of this Act: namely, that the medium in which a record, signature, or contract is created, presented or retained does not affect it's legal significance. Subsections (a) and (b) are designed to eliminate the single element of medium as a reason to deny effect or enforceability to a record, signature, or contract. The fact that the information is set forth in an electronic, as opposed to paper, record is irrelevant.

2. Under Restatement 2d Contracts Section 8, a contract may have legal effect and yet be unenforceable. Indeed, one circumstance where a record or contract may have effect but be unenforceable is in the context of the Statute of Frauds. Though a contract may be unenforceable, the records may have collateral effects, as in the case of a buyer that insures goods purchased under a contract unenforceable under the Statute of Frauds. The insurance company may not deny a claim on the ground that the buyer is not the owner, though the buyer may have no direct remedy against seller for failure to deliver. See Restatement 2d Contracts, Section 8, Illustration 4.

While this section would validate an electronic record for purposes of a statute of frauds, if an agreement to conduct the transaction electronically cannot reasonably be found (See Section 5(b)) then a necessary predicate to the applicability of this Act would be absent and this Act would not validate the electronic record. Whether the electronic record might be valid under other law is not addressed by this Act.

3. Subsections (c) and (d) provide the positive assertion that electronic records and signatures satisfy legal requirements for writings and signatures. The provisions are limited to requirements in laws that a record be in writing or be signed. This section does not address requirements imposed by other law in addition to requirements for writings and signatures See, e.g., Section 8.

Subsections (c and d) are particularized applications of subsection (a). The purpose is to validate and effectuate electronic records and signatures as the equivalent of writings, subject to all of the rules applicable to the efficacy of a writing, except as such other rules are modified by the more specific provisions of this Act.

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

Illustration 2: A sends the following e-mail to B: "I hereby offer to buy 100 widgets for $1000, delivery next Tuesday. /s/ A." B responds with the following e-mail: "I accept your offer to purchase 100 widgets for $1000, delivery next Tuesday. /s/ B." In this case

the analysis is the same as in Illustration 1 except that here the records otherwise satisfy the requirements of UCC Section 2-201(1). The transaction may not be denied legal effect solely because there is not a pen and ink "writing" or “signature”.

4. Section 8 addresses additional requirements imposed by other law which may affect the legal effect or enforceability of an electronic record in a particular case. For example, in section 8(a) the legal requirement addressed is *the provision of information* in writing. The section then sets forth the standards to be applied in determining whether the provision of information by an electronic record is the equivalent of the provision of information in writing. The requirements in section 8 are in addition to the bare validation that occurs under this section.

5. Under the substantive law applicable to a particular transaction within this Act, the legal effect of an electronic record may be separate from the issue of whether the record contains a signature. For example, where notice must be given as part of a contractual obligation, the effectiveness of the notice will turn on whether the party provided the notice regardless of whether the notice was signed (See Section 15). An electronic record attributed to a party under Section 9 and complying with the requirements of Section 15, would suffice in that case, notwithstanding that it may not contain an electronic signature.

SECTION 8. PROVISION OF INFORMATION IN WRITING; PRESENTATION OF RECORDS.

(a) If parties have agreed to conduct a transaction by electronic means and a law requires a person to provide, send, or deliver information in writing to another person, the requirement is satisfied if the information is provided, sent, or delivered, as the case may be, in an electronic record capable of retention by the recipient at the time of receipt. An electronic record is not capable of retention by the recipient if the sender or its information processing system inhibits the ability of the recipient to print or store the electronic record.

(b) If a law other than this [Act] requires a record (i) to be posted or displayed in a certain manner, (ii) to be sent, communicated, or transmitted by a specified method, or (iii) to contain information that is formatted in a certain manner, the following rules apply:

(1) The record must be posted or displayed in the manner specified in the other law.

(2) Except as otherwise provided in subsection (d)(2), the record must be sent, communicated, or transmitted by the method specified in the other law.

(3) The record must contain the information formatted in the manner specified in the other law.

(c) If a sender inhibits the ability of a recipient to store or print an electronic record, the electronic record is not enforceable against the recipient.

(d) The requirements of this section may not be varied by agreement, but:

(1) to the extent a law other than this [Act] requires information to be provided, sent, or delivered in writing but permits that requirement to be varied by agreement, the requirement under subsection (a) that the information be in the form of an electronic record capable of retention may also be varied by agreement; and

(2) a requirement under a law other than this [Act] to send, communicate, or transmit a record by [first-class mail, postage prepaid] [regular United States mail], may be varied by agreement to the extent permitted by the other law.

Source: Canadian - Uniform Electronic Commerce Act

DRAFT COMMENTS

1. This section is a savings provision, designed to assure, consistent with the fundamental purpose of this act, that otherwise applicable substantive law will not be overridden by this Act. The section makes clear that while the pen and ink provisions of such other law may be satisfied electronically, nothing in this Act vitiates the other requirements of such laws. The section addresses a number of issues related to disclosures and notice provisions in other laws.

2. This section is independent of the prior section. Section 7 refers to legal requirements for a writing. This section refers to legal requirements for the provision of information in writing or relating to the method or manner of presentation or delivery of information. The section addresses more specific legal requirements of other laws, provides standards for satisfying the more particular legal requirements, and defers to other law for satisfaction of requirements under those laws.

3. Under subsection (a), to meet a requirement of other law that information be provided in writing, the recipient of an electronic record of the information must be able to get to the electronic record and read it, and must have the ability to get back to the information in some way at a later date. Accordingly, the section requires that the electronic record be capable of retention for later review.

The section specifically provides that any inhibition on retention imposed by the sender or the sender's system will preclude satisfaction of this section because electronic information may be given to a person in a manner which prevents the person from retaining a copy the information. The policies underlying laws requiring the provision of information in writing warrant the imposition of an additional burden on the sender to make the information available in a manner which will permit subsequent reference. A difficulty does exist for senders of information because of the disparate systems of their recipients and the capabilities of those systems. Certainly where the sender or sender's system imposes an inhibition on retention by the recipient, this section has not been satisfied. It is left for the courts to determine whether the sender has complied with this section if evidence demonstrates that it is the recipient's system which precludes subsequent reference to the information.

4. Subsection (b) is a savings provision for laws which provide for the means of delivering or displaying information and which are not affected by the Act. For example, if a law requires delivery of notice by first class US mail, that means of delivery would not be affected by this Act. The information to be delivered may be provided on a disc, i.e., in electronic form, but the particular means of delivery must still be via the US postal service. Display, delivery and formatting requirements will continue to be applicable to electronic records and signatures. If those legal requirements can be satisfied in an electronic medium, e.g., the information can be presented in 20 point bold type as required by other law, this Act will validate the use of the medium, leaving to the other applicable law the question of whether the particular electronic record meets the other legal requirements. If a law requires that particular records be delivered together, or attached to other records, this Act does not preclude the delivery of the records together in an electronic communication, so long as the records are connected or associated with each other in a way determined to satisfy the other law.

5. Subsection (c) provides incentives for senders of information to use systems which will not inhibit the other party from retaining the information. However, there are circumstances where a party providing certain information may wish to inhibit retention in order to protect intellectual property rights or prevent the other party from retaining confidential information about the sender. In such cases inhibition is understandable, but if the sender wishes to enforce the record in which the information is contained, the sender may not inhibit its retention by the

recipient. Unlike subsection (a), subsection (c) applies in all transactions and simply provides for unenforceability against the recipient. Subsection (a) applies only where another law imposes the writing requirement, and subsection (a) imposes a broader responsibility on the sender to assure retention capability by the recipient.

6. The protective purposes of this section justify the non-waivability provided by Subsection (d). However, since the requirements for sending and formatting and the like are imposed by other law, to the extent other law permits waiver of such protections, there is no justification for imposing a more severe burden in an electronic environment.

SECTION 9. ATTRIBUTION AND EFFECT OF ELECTRONIC RECORD AND ELECTRONIC SIGNATURE.

(a) An electronic record or electronic signature is attributable to a person if it was the act of the person. The act of the person may be shown in any manner, including a showing of the efficacy of any security procedure applied to determine the person to which the electronic record or electronic signature was attributable.

(b) The effect of an electronic record or electronic signature attributed to a person under subsection (a) is determined from the context and surrounding circumstances at the time of its creation, execution, or adoption, including the parties' agreement, if any, and otherwise as provided by law.

DRAFT COMMENTS

1. Under subsection (a), so long as the electronic record or electronic signature resulted from a person's action it will be attributed to that person - the legal effect of that attribution is addressed in subsection (b). This section does not alter existing rules of law regarding attribution. The section assures that such rules will be applied in the electronic environment. A person's actions include actions taken by human agents of the person, as well as actions taken by an electronic agent, i.e., the tool, of the person. Although the rule may appear to state the obvious, it assures that the record or signature is not ascribed to a machine, as opposed to the person operating or programing the machine.

In each of the following cases, both the electronic record and electronic signature would be attributable to a person under subsection (a):

A. The person types his/her name as part of an e-mail purchase order**;**

B. The person's employee, pursuant to authority, types the person's name as part of an e-mail purchase order;

C. The person's computer, programmed to order goods upon receipt of inventory information within particular parameters, issues a purchase order which includes the person's name, or other identifying information, as part of the order.

In each of the above cases, law other than this Act would ascribe both the signature and the action to the person if done in a paper medium. Subsection (a) expressly provides that the same result will occur when an electronic medium is used.

2. Nothing in this section affects the use of a signature as a device for attributing a record to a person. Indeed, a signature is often the primary method for attributing a record to a person. In the foregoing examples, once the electronic signature is attributed to the person, the electronic record would also be attributed to the person, unless the person established fraud, forgery, or other invalidating cause. However, a signature is not the only method for attribution.

3. In the context of attribution of records, normally the content of the record will provide the necessary information for a finding of attribution. It is also possible that an established course of dealing between parties may result in a finding of attribution Just as with a paper record, evidence of forgery or counterfeiting may be introduced to rebut the evidence of attribution.

The use of facsimile transmissions provides a number of examples of attribution using information other than a signature. A facsimile may be attributed to a person because of the information printed across the top of the page that indicates the machine from which it was sent. Similarly, the transmission may contain a letterhead which identifies the sender. Some cases have held that the letterhead actually constituted a signature because it was a symbol adopted by the sender with intent to authenticate the facsimile. However, the signature determination resulted from the necessary finding of intention in that case. Other cases have found facsimile letterheads NOT to be signatures because the requisite intention was not present. The critical point is that with or without a signature, information within the electronic record may well suffice to provide the facts resulting in attribution of an electronic record to a particular party.

4. Certain information may be present in an electronic environment that does not appear to attribute but which clearly links a person to a particular record. Numerical codes, personal identification numbers, public and private key combinations, all serve to establish the party to whom an electronic record should be attributed. Of course security procedures will be another piece of evidence available to establish attribution.

The inclusion of a specific reference to security procedures as a means of proving attribution is salutary because of the unique importance of security procedures in the electronic environment. In certain processes, a technical and technological security procedure may be the best way to convince a trier of fact that a particular electronic record or signature was that of a particular person. In certain circumstances, the use of a security procedure to establish that the record, and related signature came from the person's business might be necessary to overcome a claim that a hacker intervened. The reference to security procedures is not intended to suggest that other forms of proof of attribution should be accorded less persuasive effect. It is also important to recall that the particular strength of a given procedure does not affect the

procedure's status as a security procedure, but only affects the weight to be accorded the evidence of the security procedure as tending to establish attribution.

5. This section does apply in determining the effect of a "click-through" transaction. A "click-through" transaction involves a process which, if executed with an intent to "sign," will be an electronic signature directly covered. See definition of Electronic Signature. In the context of an anonymous "click-through" issues of proof will be paramount. This section will be relevant to establish that the resulting electronic record is attributable to a particular person upon the requisite proof, including security procedures which may track the source of the click-through.

6. Once it is established that a record or signature is attributable to a particular party, the effect of a record or signature must be determined in light of the context and surrounding circumstances, including the parties' agreement, if any. Also informing the effect of any attribution will be other legal requirements considered in light of the context. Subsection (b) addresses the effect of the record or signature once attributed to a person.

SECTION 10. EFFECT OF CHANGE OR ERROR. If a change or error in an electronic record occurs in a transmission between parties to a transaction, the following rules apply:

(1) If the parties have agreed to use a security procedure to detect changes or errors and one party has conformed to the procedure, but the other party has not, and the nonconforming party would have detected the change or error had that party also conformed, the conforming party may avoid the effect of the changed or erroneous electronic record.

(2) In an automated transaction involving an individual, the individual may avoid the effect of an electronic record that resulted from an error made by the individual in dealing with the electronic agent of another person if the electronic agent did not provide an opportunity for the prevention or correction of the error and, at the time the individual learns of the error, the individual:

(A) promptly notifies the other person of the error and that the individual did not intend to be bound by the electronic record received by the other person;

(B) takes reasonable steps, including steps that conform to the other person's reasonable instructions, to return to the other person or, if instructed by the other person, to destroy the consideration received, if any, as a result of the erroneous electronic record; and

(C) has not used or received any benefit or value from the consideration, if any, received from the other person.

(3) If neither paragraph (1) nor paragraph (2) applies, the change or error has the effect provided by other law, including the law of mistake, and the parties' contract, if any.

(4) Paragraphs (2) and (3) may not be varied by agreement.

Source: Restatement 2d Contracts, Sections 152-155.

DRAFT COMMENTS

1. This section is limited to changes and errors occurring in transmissions between parties - whether person-person (paragraph 1) or in an automated transaction involving an individual and a machine (paragraphs 1 and 2). The section focuses on the effect of changes and errors occurring when records are exchanged between parties. In cases where changes and errors occur in contexts other than transmission, the law of mistake is expressly made applicable to resolve the conflict.

The section covers both changes and errors. For example, if Buyer sends a message to Seller ordering 100 widgets, but Buyer's information processing system changes the order to 1000 widgets, a "change" has occurred between what Buyer transmitted and what Seller received. If on the other hand, Buyer typed in 1000 intending to order only 100, but sent the message before noting the mistake, an error would have occurred which would also be covered by this section.

2. Paragraph (1) deals with any transmission where the parties have agreed to use a security procedure to detect changes and errors. It operates against the non-conforming party, i.e., the party in the best position to have avoided the change or error, regardless of whether that person is the sender or recipient. The source of the error/change is not indicated, and so both human and machine errors/changes would be covered. With respect to errors or changes that would not be detected by the security procedure even if applied, the parties are left to the general law of mistake to resolve the dispute.

3. Paragraph (1) applies only in the situation where a security procedure would detect the error/change but one party fails to use the procedure and does not detect the error/change. In such a case, consistent with the law of mistake generally, the record is made avoidable at the

instance of the party who took all available steps to avoid the mistake. See Restatement 2d Contracts Section 152-154.

Making the erroneous record avoidable by the conforming party is consistent with Sections 153 and 154 of the Restatement 2d Contracts because the non-conforming party was in the best position to avoid the problem, and would bear the risk of mistake. Such a case would constitute mistake by one party. The mistaken party (the conforming party) would be entitled to avoid any resulting contract under Section 153 because s/he does not have the risk of mistake and the non-conforming party had reason to know of the mistake.

4. As with paragraph (1), paragraph (2), when applicable, allows the mistaken party to avoid the effect of the erroneous electronic record. However, the subsection is limited to human error on the part of an individual when dealing with the electronic agent of the other party. In a transaction between individuals there is a greater ability to correct the error before parties have acted on it. However, when an individual makes an error while dealing with the electronic agent of the other party, it may not be possible to correct the error before the other party has shipped or taken other action in reliance on the erroneous record.

Paragraph (2) applies only to errors made by individuals. If the error results from the electronic agent it would constitute a system error. In such a case the effect of that error would be resolved under paragraph (1) if applicable, otherwise under paragraph (3) and the general law of mistake.

5. The party acting through the electronic agent/machine is given incentives by this section to build in safeguards which enable the individual to prevent the sending of an erroneous record, or correct the error once sent. For example, the electronic agent may be programed to provide a “confirmation screen” to the individual setting forth all the information the individual initially approved. This would provide the individual with the ability to prevent the erroneous record from ever being sent. Similarly, the electronic agent might receive the record sent by the individual and then send back a confirmation which the individual must again accept before the transaction is completed. This would allow for correction of an erroneous record. In either case, the electronic agent would “provide an opportunity for prevention or correction of the error,” *and the subsection would not apply*.

6. Paragraph (2) also places additional requirements on the mistaken individual before the paragraph may be invoked to avoid an erroneous electronic record. The individual must take prompt action to advise the other party of the error and the fact that the individual did not intend the electronic record. Whether the action is prompt must be determined from all the circumstances including the individual’s ability to contact the other party. The individual should advise the other party both of the error and of the lack of intention to be bound (i.e., avoidance) by the electronic record received. Since this provision allows avoidance by the mistaken party, that party should also be required to expressly note that it is seeking to avoid the electronic record, i.e., lacked the intention to be bound.

Second, restitution is normally required in order to undo a mistaken transaction. Accordingly, the individual must also return or destroy any consideration received, adhering to

instructions from the other party in any case. This is to assure that the other party retains control over the consideration sent in error.

Finally, and most importantly in regard to transactions involving intermediaries which may be harmed because transactions cannot be unwound, the individual cannot have received any benefit from the transaction. This section prevents a party from unwinding a transaction after the delivery of value and consideration which cannot be returned or destroyed. For example, if the consideration received is information, it may not be possible to avoid the benefit conferred. While the information itself could be returned, mere access to the information, or the ability to redistribute the information would constitute a benefit precluding the mistaken party from unwinding the transaction. It may also occur that the mistaken party receives consideration which changes in value between the time of receipt and the first opportunity to return. In such a case restitution cannot be made adequately, and the transaction would not be avoidable. In each of the foregoing cases, under subparagraph (2)(c), the individual would have received the benefit of the consideration and would NOT be able to avoid the erroneous electronic record.

7. In all cases not covered by paragraphs (1) or (2), where error or change to a record occur, the parties contract, or other law, specifically including the law of mistake, applies to resolve any dispute. If the error occurs in the context of record retention, Section12 will apply. In that case the standard is one of accuracy and retrievability of the information.

8. Paragraph (4) makes the error correction provision in paragraph (2) and the application of the law of mistake in paragraph (3) non-variable. Paragraph (2) provides incentives for parties using electronic agents to establish safeguards for individuals dealing with them. It also avoids unjustified windfalls to the individual by erecting stringent requirements before the individual may exercise the right of avoidance under the paragraph. Therefore, there is no reason to permit parties to avoid the paragraph by agreement. Rather, parties should satisfy the paragraph's requirements.

SECTION 11. NOTARIZATION AND ACKNOWLEDGMENT. If a law requires a signature or record to be notarized, acknowledged, verified, or made under oath, the requirement is satisfied if the electronic signature of the person authorized to perform those acts, together with all other information required to be included by other applicable law, is attached to or logically associated with the signature or record.

DRAFT COMMENTS

This Section permits a notary public and other authorized officers to act electronically, effectively removing the stamp/seal requirements. However, the section does not eliminate any of the other requirements of notarial laws, and consistent with the entire thrust of this Act, simply allows the signing and information to be accomplished in an electronic medium.

For example, Buyer wishes to send a notarized Real Estate Purchase Agreement to Seller via e-mail. The notary must appear in the room with the Buyer, satisfy him/herself as to the identity of the Buyer, and swear to that identification. All that activity must be reflected as part of the electronic Purchase Agreement and the notary's electronic signature must appear as a part of the electronic real estate purchase contract.

As another example, Buyer seeks to send Seller an affidavit averring defects in the products received. A court clerk, authorized under state law to administer oaths, is present with Buyer in a room. The Clerk administers the oath and includes the statement of the oath, together with any other requisite information, in the electronic record to be sent to the Seller. Upon administering the oath and witnessing the application of Buyer's electronic signature to the electronic record, the Clerk also applies his electronic signature to the electronic record. So long as all substantive requirements of other applicable law have been fulfilled and are reflected in the electronic record, the sworn electronic record of Buyer is as effective as if it had been transcribed on paper.

SECTION 12. RETENTION OF ELECTRONIC RECORDS; ORIGINALS.

(a) If a law requires that a record be retained, the requirement is satisfied by retaining an electronic record of the information in the record which:

(1) accurately reflects the information set forth in the record after it was first generated in its final form as an electronic record or otherwise; and

(2) remains accessible for later reference.

(b) A requirement to retain a record in accordance with subsection (a) does not apply to any information the sole purpose of which is to enable the record to be sent, communicated, or received.

(c) A person may satisfy subsection (a) by using the services of another person if the requirements of that subsection are satisfied.

(d) If a law requires a record to be presented or retained in its original form, or provides consequences if the record is not presented or retained in its original form, that law is satisfied by an electronic record retained in accordance with subsection (a).

(e) If a law requires retention of a check, that requirement is satisfied by retention of an electronic record of the information on the front and back of the check in accordance with subsection (a).

(f) A record retained as an electronic record in accordance with subsection (a) satisfies a law requiring a person to retain a record for evidentiary, audit, or like purposes, unless a law enacted after the effective date of this [Act] specifically prohibits the use of an electronic record for the specified purpose.

(g) This section does not preclude a governmental agency of this State from specifying additional requirements for the retention of a record subject to the agency's jurisdiction.

Source: UNCITRAL Model Law On Electronic Commerce Articles 8 and 10.

DRAFT COMMENTS

1. This section deals with the serviceability of electronic records as retained records and originals. So long as there exists reliable assurance that the electronic record accurately reproduces the information, this section continues the theme of establishing the functional equivalence of electronic and paper-based records. This is consistent with Fed.R.Evid. 1001(3) and Unif.R.Evid. 1001(3) (1974). This section assures that information stored electronically will remain effective for all audit, evidentiary, archival and similar purposes.

2. In an electronic medium, the concept of an original document is problematic. For example, as one drafts a document on a computer the "original" is either on a disc or the hard drive to which the document has been initially saved. If one periodically saves the draft, the fact is that at times a document may be first saved to disc then to hard drive, and at others vice versa. In such a case the "original" may change from the information on the disc to the information on the hard drive. Indeed, it may be argued that the "original" exists solely in RAM and, in a sense, the

original is destroyed when a "copy" is saved to a disc or to the hard drive. In any event, in the context of record retention, the concern focuses on the integrity of the information, and not with its "originality."

3. Subsection (a) requires accuracy and the ability to access at a later time. The requirement of accuracy is derived from the Uniform and Federal Rules of Evidence. The requirement of continuing accessibility addresses the issue of technology obsolescence and the need to update and migrate information to developing systems. It is not unlikely that within the span of 5-10 years (a period during which retention of much information is required) a corporation may evolve through one or more generations of technology. More to the point, this technology may be incompatible with each other necessitating the reconversion of information from one system to the other.

For example, certain operating systems from the early 1980's, e.g., memory typewriters, became obsolete with the development of personal computers. The information originally stored on the memory typewriter would need to be converted to the personal computer system in a way meeting the standards for accuracy contemplated by this section. It is also possible that the medium on which the information is stored is less stable. For example, information stored on floppy discs is generally less stable, and subject to a greater threat of disintegration, that information stored on a computer hard drive. In either case, the continuing accessibility issue must be satisfied to validate information stored by electronic means under this section.

This section permits 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.

The subsection refers to the information contained in an electronic record, rather than relying on the term electronic record, as a matter of clarity that the critical aspect in retention is the information itself. What information must be retained is determined by the purpose for which the information is needed. If the addressing and pathway information regarding an e-mail is relevant, then that information should also be retained. However if it is the substance of the e-mail that is relevant, only that information need be retained. Of course, wise record retention would include all such information since what information will be relevant at a later time will not be known.

4. Subsections (b) and (c) simply make clear that certain ancillary information or the use of third parties, does not affect the serviceability of records and information retained electronically. Again, the relevance of particular information will not be known until that information is required at a subsequent time.

5. Subsection (d) continues the theme of the Act as validating electronic records as originals where the law requires retention of an original. The validation of electronic records and electronic information as originals is consistent with the Uniform Rules of Evidence. See Uniform Rules of Evidence 1001(3), 1002, 1003 and 1004.

6. Subsection (e) specifically addresses particular concerns regarding check retention statutes in many jurisdictions. A Report compiled by the Federal Reserve Bank of Boston

identifies hundreds of state laws which require the retention or production of original canceled checks. Such requirements preclude banks and their customers from realizing the benefits and efficiencies related to truncation processes otherwise validated under current law. The benefits to banks and their customers from electronic check retention are effectuated by this provision.

7. Subsections (f) and (g) generally address other record retention statutes. As with check retention, all businesses and individuals may realize significant savings from electronic record retention. So long as the standards in Section 12 are satisfied, this section permits all parties to obtain those benefits. As always the government may require records in any medium, however, these subsections require a governmental agency to specifically identify the types of records and requirements that will be imposed.

SECTION 13. ADMISSIBILITY IN EVIDENCE. In a proceeding, evidence of a record or signature may not be excluded solely because it is in electronic form.

Source: UNCITRAL Model Law on Electronic Commerce Article 9.

DRAFT COMMENT

Like section 7, this Section prevents the nonrecognition of electronic records and signatures solely on the ground of the media in which information is presented. Nothing in this section relieves a party from establishing the necessary foundation for the admission of an electronic record. See Uniform Rules of Evidence 1001(3), 1002,1003 and 1004.

SECTION 14. AUTOMATED TRANSACTION. In an automated transaction, the following rules apply:

(1) A contract may be formed by the interaction of electronic agents of the parties, even if no individual was aware of or reviewed the electronic agents' actions or the resulting terms and agreements.

(2) A contract may be formed by the interaction of an electronic agent and an individual, acting on the individual's own behalf or for another person, including by an interaction in which the individual performs actions that the individual is free to refuse to perform and which

the individual knows or has reason to know will cause the electronic agent to complete the transaction or performance.

(3) The terms of the contract are determined by the substantive law applicable to it.

Source: UNICTRAL Model Law on Electronic Commerce Article 11.

DRAFT COMMENTS

1. This section confirms that contracts can be formed by machines functioning as electronic agents for parties to a transaction. It negates any claim that lack of human intent, at the time of contract formation, prevents contract formation. When machines are involved, the requisite intention flows from the programing and use of the machine. As in other cases, these are salutary provisions consistent with the fundamental purpose of the Act to remove barriers to electronic transactions while leaving the substantive law, e.g., law of mistake, law of contract formation, unaffected to the greatest extent possible.

2. The process in paragraph (2) validates an anonymous click-through transaction. It is possible that an anonymous click-through process may simply result in no recognizable legal relationship, e.g., A goes to a person's website and acquires access without in any way identifying herself, or otherwise indicating agreement or assent to any limitation or obligation, and the owner's site grants A access. In such a case no legal relationship has been created.

On the other hand it may be possible that A's actions indicate agreement to a particular term. For example, A goes to a website and is confronted by an initial screen which advises her that the information at this site is proprietary, that A may use the information for her own personal purposes, but that, by clicking below, A agrees that any other use without the site owner's permission is prohibited. If A clicks "agree" and downloads the information and then uses the information for other, prohibited purposes, should not A be bound by the click? It seems the answer properly should be, and would be, yes.

If the owner can show that the only way A could have obtained the information was from his website, and that the process to access the subject information required that A must have clicked the "I agree" button after having the ability to see the conditions on use, A has performed actions which A was free to refuse, which A knew would cause the site to grant her access, i.e., "complete the transaction." The terms of the resulting contract will be determined under general contract principles, but will include the limitation on A's use of the information, as a condition precedent to granting her access to the information.

3. In the transaction set forth in Comment 2, the record of the transaction also will include an electronic signature. By clicking "I agree" A adopted a process with the intent to "sign," i.e., bind herself to a legal obligation, the resulting record of the transaction. If a "signed writing" were required under otherwise applicable law, this transaction would be enforceable. If a "signed writing" were not required, it may be sufficient to establish that the electronic record is attributable to A under section 9. Attribution may be shown in any manner reasonable including

showing that, of necessity, A could only have gotten the information through the process at the website.

SECTION 15. TIME AND PLACE OF SENDING AND RECEIPT.

(a) Unless otherwise agreed between the sender and the recipient, an electronic record is sent when it:

(1) is addressed properly or otherwise directed properly to an information processing system that the recipient has designated or uses for the purpose of receiving electronic records or information of the type sent and from which the recipient is able to retrieve the electronic record;

(2) is in a form capable of being processed by that system; and

(3) enters an information processing system outside the control of the sender or of a person that sent the electronic record on behalf of the sender or enters a region of the information processing system designated or used by the recipient which is under the control of the recipient.

(b) Unless otherwise agreed between a sender and the recipient, an electronic record is received when:

(1) it enters an information processing system that the recipient has designated or uses for the purpose of receiving electronic records or information of the type sent and from which the recipient is able to retrieve the electronic record; and

(2) it is in a form capable of being processed by that system.

(c) Subsection (b) applies even if the place the information processing system is located is different from the place the electronic record is deemed to be received under subsection (d).

(d) Unless otherwise expressly provided in the electronic record or agreed between the sender and the recipient, an electronic record is deemed to be sent from the sender's place of business and to be received at the recipient's place of business. For purposes of this subsection, the following rules apply:

(1) If the sender or recipient has more than one place of business, the place of business of that person is the place having the closest relationship to the underlying transaction.

(2) If the sender or the recipient does not have a place of business, the place of business is the sender's or recipient's residence, as the case may be.

(e) An electronic record is received under subsection (b) even if no individual is aware of its receipt.

(f) Receipt of an electronic acknowledgment from an information processing system described in subsection (b) establishes that a record was received but, by itself, does not establish that the content sent corresponds to the content received.

(g) If a person is aware that an electronic record purportedly sent under subsection (a), or purportedly received under subsection (b), was not actually sent or received, the legal effect of the sending or receipt is determined by other applicable law. Except to the extent permitted by the other law, the requirements of this subsection may not be varied by agreement.

Source: UNCITRAL Model Law on Electronic Commerce Article 15.

UETA Final Text & Draft Commentary
December 13, 1999

DRAFT COMMENTS

1. This section provides default rules regarding when and from where an electronic record is sent and when and where an electronic record is received. This section does not address the efficacy of the record that is sent or received. That is, whether a record is unintelligible or unusable by a recipient is a separate issue from whether that record was sent or received. The effectiveness of an illegible record, whether it binds any party, are questions left to other law.

2. Subsection (a) furnishes rules for determining when an electronic record is sent. The effect of the sending and its import are determined by other law once it is determined that a sending has occurred.

In order to have a proper sending, the subsection requires that information be properly addressed or otherwise directed to the recipient. In order to send within the meaning of this section, there must be specific information which will direct the record to the intended recipient. Although mass electronic sending is not precluded, a general broadcast message, sent to systems rather than individuals, would not suffice as a sending.

The record will be considered sent once it leaves the control of the sender, or comes under the control of the recipient. Records sent through e-mail or the internet will pass through many different server systems. Accordingly, the critical element when more than one system is involved is the loss of control by the sender.

However, the structure of many message delivery systems is such that electronic records may actually never leave the control of the sender. For example, within a university or corporate setting, e-mail sent within the system to another faculty member is technically not out of the sender's control since it never leaves the organization's server. Accordingly, to qualify as a sending, the e-mail must arrive at a point where the recipient has control. The effect of an electronic record that is thereafter "pulled back," e.g., removed from a mailbox, is not addressed by this section. The analog in the paper world would be removing a letter from a person's mailbox. As in the case of providing information electronically under Section 8, the recipient's ability to receive a message should be judged from the perspective of whether the sender has done any action which would preclude retrieval. This is especially the case in regard to sending, since the sender must direct the record to a system designated or used by the recipient.

3. Subsection (b) provides simply that when a record enters the system which the recipient has designated or uses and to which it has access, in a form capable of being processed by that system, it is received. By keying receipt to a system which is accessible by the recipient, the issue of a recipient leaving messages with a server or other service to avoid receipt, is removed. However, the issue of how the sender proves the time of receipt is not resolved by this section.

To assure that the recipient retains control of the place of receipt, subsection (b) requires that the system be specified or used by the recipient, and that the system be used or designated for the type of record being sent. Many people have multiple e-mails for different purposes, and the purpose is to assure that recipients can designate the e-mail address or system to be used in a particular transaction. For example, the recipient retains the ability to designate a home e-mail for personal matters, work e-mail for official business, or a separate organizational e-mail solely for

the business purposes of that organization. If A sends B a notice at his home which relates to business, it may not be deemed received if B designated his business address as the sole address for business purposes. Actual knowledge upon seeing it at home would qualify as receipt under the otherwise applicable substantive law.

4. Subsections (c) and (d) provide default rules for determining where a record will be considered to have been sent or received. The focus is on the place of business of the recipient and not the physical location of the information processing system, which may bear absolutely no relation to the transaction between the parties. It is not uncommon for users of electronic commerce to communicate from one State to another without knowing the location of information systems through which communication is operated. In addition, the location of certain communication systems may change without either of the parties being aware of the change. Accordingly, where the place of sending or receipt is an issue under other applicable law, e.g., conflict of laws issues, tax issues, the relevant location should be the location of the sender or recipient and not the location of the information processing system.

Subsection (d) assures individual flexibility in designating the place from which a record will be considered sent or at which a record will be considered received. Under subsection (d) a person may designate the place of sending or receipt unilaterally in an electronic record. This ability, as with the ability to designate by agreement, may be limited by otherwise applicable law to places having a reasonable relationship to the transaction.

5. Subsection (e) makes clear that receipt is not dependent on a person having notice that the record is in the person's system. Receipt occurs when the record reaches the designated system whether or not the recipient ever retrieves the record. The paper analog is the recipient who never reads a mail notice.

6. Subsection (f) provides legal certainty regarding the effect of an electronic acknowledgment. It only addresses the fact of receipt, not the quality of the content, nor whether the electronic record was read or "opened."

7. Subsection (g) limits the parties' ability to vary the method for sending and receipt provided in subsections (a) and (b), when there is a legal requirement for the sending or receipt. As in other circumstances where legal requirements derive from other substantive law, to the extent that the other law permits variation by agreement, this Act does not impose any additional requirements, and provisions of this Act may be varied to the extent provided in the other law.

SECTION 16. TRANSFERABLE RECORDS.

(a) In this section, "transferable record" means an electronic record that:

(1) would be a note under [Article 3 of the Uniform Commercial Code] or a document under [Article 7 of the Uniform Commercial Code] if the electronic record were in writing; and

(2) the issuer of the electronic record expressly has agreed is a transferable record.

(b) A person has control of a transferable record if a system employed for evidencing the transfer of interests in the transferable record reliably establishes that person as the person to which the transferable record was issued or transferred.

(c) A system satisfies subsection (b), and a person is deemed to have control of a transferable record, if the transferable record is created, stored, and assigned in such a manner that:

(1) a single authoritative copy of the transferable record exists which is unique, identifiable, and, except as otherwise provided in paragraphs (4), (5), and (6), unalterable;

(2) the authoritative copy identifies the person asserting control as:

(A) the person to which the transferable record was issued; or

(B) if the authoritative copy indicates that the transferable record has been transferred, the person to which the transferable record was most recently transferred;

(3) the authoritative copy is communicated to and maintained by the person asserting control or its designated custodian;

(4) copies or revisions that add or change an identified assignee of the authoritative copy can be made only with the consent of the person asserting control;

(5) each copy of the authoritative copy and any copy of a copy is readily identifiable as a copy that is not the authoritative copy; and

(6) any revision of the authoritative copy is readily identifiable as authorized or unauthorized.

(d) Except as otherwise agreed, a person having control of a transferable record is the holder, as defined in [Section 1-201(20) of the Uniform Commercial Code], of the transferable record and has the same rights and defenses as a holder of an equivalent record or writing under [the Uniform Commercial Code], including, if the applicable statutory requirements under [Section 3-302(a), 7-501, or 9-308 of the Uniform Commercial Code] are satisfied, the rights and defenses of a holder in due course, a holder to which a negotiable document of title has been duly negotiated, or a purchaser, respectively. Delivery, possession, and indorsement are not required to obtain or exercise any of the rights under this subsection.

(e) Except as otherwise agreed, an obligor under a transferable record has the same rights and defenses as an equivalent obligor under equivalent records or writings under [the Uniform Commercial Code].

(f) If requested by a person against which enforcement is sought, the person seeking to enforce the transferable record shall provide reasonable proof that the person is in control of the transferable record. Proof may include access to the authoritative copy of the transferable record and related business records sufficient to review the terms of the transferable record and to establish the identity of the person having control of the transferable record.

Source: Revised Article 9, Section 9-105.

DRAFT COMMENTS

1. Paper negotiable instruments and documents are unique in the fact that a tangible token - a piece of paper - actually embodies intangible rights and obligations. The extreme difficulty of creating a unique electronic token which embodies the singular attributes of a paper negotiable document or instrument, dictates that the rules relating to negotiable documents and instruments not be simply amended to allow the use of an electronic record for the requisite paper writing. However, the desirability of establishing rules by which business parties might be able to acquire

some of the benefits of negotiability in an electronic environment is recognized by the inclusion of this Section on Transferable Records.

This section provides legal support for the creation, transferability and enforceability of electronic note and document equivalents, as against the issuer/obligor. The certainty created by the section provides the requisite incentive for industry to develop the systems and processes, which involve significant expenditures of time and resources, to enable the use of such electronic documents.

The importance of facilitating the development of systems which will permit electronic equivalents is a function of cost, efficiency and safety for the records. The storage cost and space needed for the billions of paper notes and documents is phenomenal. Further, natural disasters can wreak havoc on the ability to meet legal requirements for retaining, retrieving and delivering paper instruments. The development of electronic systems meeting the rigorous standards of this Section will permit retention of copies which reflect the same integrity as the original. As a result storage, transmission and other costs will be reduced, while security and the ability to satisfy legal requirements governing such paper records will be enhanced.

Section 16 provides for the creation of an electronic record which may be controlled by the holder who in turn may obtain the benefits of holder in due course and good faith purchaser status. If the benefits and efficiencies of electronic media are to be realized in this industry it is essential to establish a mean by which transactions involving paper promissory notes may be accomplished completely electronically. Particularly as other aspects of such transactions are accomplished electronically, the drag on the transaction of requiring a paper note becomes evident. In addition to alleviating the logistical problems of generating and storing and retrieving such paper notes, the mailing and transmission costs associated with such transactions will also be reduced.

2. The definition of transferable record is limited in two significant ways. First, only the equivalent of paper promissory notes and paper documents of title can be created as transferable records. Notes and Documents of Title do not impact the broad systems that relate to the broader payments mechanisms related, for example, to checks. Impacting the check collection system by allowing for “electronic checks” has ramifications well beyond the ability of this Act. Accordingly, this Act excludes from its scope, transactions governed by UCC Articles 3 and 4. The limitation to promissory note equivalents in Section 16 is quite important in that regard because of the ability to deal with many enforcement issues by contract without affecting such systemic concerns.

Second, not only is Section 16 limited to electronic records which would qualify as negotiable promissory notes or documents if they were in writing, but the issuer of the electronic record must expressly agree that the electronic record is to be considered a transferable record. The definition of transferable record as “an electronic record that...the issuer of the electronic record expressly has agreed is a transferable record” indicates that the electronic record itself will likely set forth the issuer’s agreement, though it may be argued that a contemporaneous electronic or written record might set forth the issuer’s agreement. However, conversion of a paper note issued as such would not be possible because the issuer would not be the issuer, in such a case, of

an electronic record. The purpose of such a restriction is to assure that transferable records can only be created at the time of issuance by the obligor. The possibility that a paper note might be electrified and then intentionally destroyed was not intended to be covered by Section 16.

The requirement that the obligor expressly agree in the electronic record to its treatment as a transferable record does not otherwise affect the characterization of a transferable record (i.e., does not affect what would be a paper note) because it is a statutory condition. Further, it does not obligate the issuer to undertake to do any other act than the payment of the obligation evidenced by the transferable record. Therefore, it does not make the transferable record "conditional" within the meaning of Section 104(a)(3).

3. Under Section 16 acquisition of "control" over an electronic record serves as a substitute for "possession" in the paper analog. More precisely, "control" under Section 16 serves as the substitute for delivery, indorsement and possession of a negotiable promissory note or negotiable document of title. Section 16(b) allows control to be found so long as "a system employed for evidencing the transfer of interests in the transferable record reliably establishes [the person claiming control] as the person to which the transferable record was issued or transferred." The key point is that a system, whether involving third party registry or technological safeguards, must be shown to reliably establish the identity of *the* person entitled to payment. Section 16(c) then sets forth a safe harbor list of very strict requirements for such a system. The specific provisions listed in Section 16(c) are derived from Section 105 of Revised Article 9. Generally, the transferable record must be unique, identifiable, and except as specifically permitted, unalterable. That "authoritative copy" must (i) identify the person claiming control as the person to whom the record was issued or most recently transferred, (ii) be maintained by the person claiming control or its designee, and (iii) be unalterable except with the permission of the person claiming control. In addition any copy of the authoritative copy must be readily identifiable as a copy and all revisions must be readily identifiable as authorized or unauthorized.

The control requirements may be satisfied through the use of a trusted third party registry system. Such systems are currently in place with regard to the transfer of securities entitlements under Article 8 of the UCC, and in the transfer of cotton warehouse receipts under the program sponsored by the United States Department of Agriculture. This Act would recognize the use of such a system so long as the standards of subsection (c) were satisfied. In addition, a technological system which met such exacting standards would also be permitted under Section 16.

For example, a borrower signs an electronic record which would be a promissory note or document if it were paper. The borrower specifically agrees in the electronic record that it will qualify as a transferable record under this section. The lender implements a newly developed technological system which dates, encrypts, and stores all the electronic information in the transferable record in a manner which lender can demonstrate reliably establishes lender as the person to which the transferable record was issued. In the alternative, the lender may contract with a third party to act as a registry for all such transferable records, retaining records establishing the party to whom the record was issued and all subsequent transfers of the record.

An example of this latter method for assuring control is the system established for the issuance and transfer of electronic cotton warehouse receipts under 7 C.F.R. section 735 et seq.

Of greatest importance in the system used is the ability to securely and demonstrably be able to transfer the record to others in a manner which assures that only one "holder" exists. The need for such certainty and security resulted in the very stringent standards for a system outlined in subsection (c). A system relying on a third party registry is likely the most effective way to satisfy the requirements of subsection (c) that the transferable record remain unique, identifiable and unalterable, while also providing the means to assure that the transferee is clearly noted and identified.

It must be remembered that Section 16 was drafted in order to provide sufficient legal certainty regarding the rights of those in control of such electronic records, that legal incentives would exist to warrant the development of systems which would establish the requisite control. During the drafting of Section 16, representatives from the Federal Reserve carefully scrutinized the impact of any electronicization of any aspect of the national payment system. Section 16 represents a compromise position which, as noted, serves as a bridge pending more detailed study and consideration of what legal changes, if any, are necessary or appropriate in the context of the payment systems impacted. Accordingly, Section 16 provides limited scope for the attainment of important rights derived from the concept of negotiability, in order to permit the development of systems which will satisfy its strict requirements for control.

4. It is important to note what the Section does not provide. Issues related to enforceability against intermediate transferees and transferors (i.e., indorser liability under a paper note), warranty liability that would attach in a paper note, and issues of the effect of taking a transferable record on the underlying obligation, are NOT addressed by this section. Such matters must be addressed, if at all, by contract between and among the parties in the chain of transmission and transfer of the transferable record. In the event that such matters are not addressed by the contract, the issues would need to be resolved under otherwise applicable law. Other law may include general contract principles of assignment and assumption, or may include rules from Article 3 applied by analogy.

For example, Issuer agrees to pay a debt by means of a transferable record issued to A. Unless there is agreement between issuer and A that the transferable record "suspends" the underlying obligation (see UCC Section 3-310), A would not be prevented from enforcing the underlying obligation without the transferable record. Similarly, if A transfers the transferable record to B by means granting B control, B may obtain holder in due course rights against the obligor/issuer, but B's recourse against A would not be clear unless A specifically agreed to remain liable under the transferable record. Although the rules of Article 3 may be applied by analogy in an appropriate context, in the absence of agreement in the transferable record, the liability of the transferor would not be clear.

5. Current business models exist which rely for their efficacy on the benefits of negotiability. A principal example, and one which informed much of the development of Section 16, involves the mortgage backed securities industry. Aggregators of commercial paper acquire mortgage secured promissory notes following a chain of transfers beginning with the origination

of the mortgage loan by a mortgage broker. In the course of the transfers of this paper, buyers of the notes and lenders/secured parties for these buyers will intervene. For the ultimate purchaser, the ability to rely on holder in due course and a good faith purchaser status creates the legal security necessary to issue its own investment securities which are backed by the obligations evidenced by the notes purchased. Only through their HIDC status can these purchasers be assured that third party claims will be barred. Only through their HIDC status can the end purchaser avoid the incredible burden of requiring and assuring that each person in the chain of transfer has waived any and all defenses to performance which may be created during the chain of transfer.

6. This Section is a stand-alone provision. Although references are made to specific provisions in Article 3, Article 7, and Article 9 of the Uniform Commercial Code, these provisions are incorporated into this Act and made the applicable rules for purposes of this Act. The rights of parties to transferable records are established under subsections (d) and (e). Subsection (d) provides rules for determining the rights of a party in control of a transferable record. The subsection makes clear that the rights are determined under this section, and not under other law, by incorporating the rules on the manner of acquisition into this statute. The last sentence of subsection (d) is intended to assure that requirements related to notions of possession, which are inherently inconsistent with the idea of an electronic record, are not incorporated into this statute.

If a person establishes control, Section 16(d) provides that that person is the "holder" of the transferable record which is equivalent to a holder of an analogous paper negotiable instrument. More importantly, if the person acquired control in a manner which would make it a holder in due course of an equivalent paper record, the person acquires the rights of a HIDC. The person in control would therefore be able to enforce the transferable record against the obligor regardless of intervening claims and defenses. However, by pulling these rights into Section 16, this Act does NOT validate the wholesale electrification of promissory notes under Article 3.

Further, it is important to understand that a transferable record under Section 16, while having no counterpart under Article 3, would likely be an "account" under Article 9. Accordingly, two separate bodies of law would apply to that asset of the obligee. A taker of the transferable record under Section 16 may acquire purchaser rights under Article 9, however, those rights may be defeated by a trustee in bankruptcy of a prior person in control unless perfection under Article 9 by filing is achieved. If the person in control also takes control in a manner granting it holder in due course status, of course that person would take free of any claim by a bankruptcy trustee or lien creditor.

7. Subsection (e) accords to the obligor of the transferable record rights equal to those of an obligor under an equivalent paper record. Accordingly, unless a waiver of defense clause is obtained in the electronic record, or the transferee obtains HDC rights under subsection (d), the obligor has all the rights and defenses available to it under a contract assignment. Additionally, the obligor has the right to have the electronic record altered or "noted" to indicate payment.

8. Subsection (f) grants the obligor the right to have the transferable record and other information made available for purposes of assuring the correct person to pay. This will allow the obligor to protect its interest and obtain the defense of discharge by payment or performance.

This is particularly important because a person receiving subsequent control under the appropriate circumstances may well qualify as a holder in course who can again enforce payment of the transferable record.

9. Section 16 is a singular exception to the thrust of this Act to simply validate electronic media used in commercial transactions. Section 16 actually provides a means for expanding electronic commerce. It provides certainty to lenders and investors regarding the enforceability of a new class of financial services. It is hoped that the legal protections afforded by Section 16 will engender the development of technological and business models which will permit realization of the significant cost savings and efficiencies available through electronic transacting in the financial services industry. Although only a bridge to more detailed consideration of the broad issues related to negotiability in an electronic context, Section 16 provides the impetus for that broader consideration while allowing continuation of developing technological and business models.

[**SECTION 17. CREATION AND RETENTION OF ELECTRONIC RECORDS AND CONVERSION OF WRITTEN RECORDS BY GOVERNMENTAL AGENCIES.**

[Each governmental agency] [The [designated state officer]] of this State shall determine whether, and the extent to which, [it] [a governmental agency] will create and retain electronic records and convert written records to electronic records.]

DRAFT COMMENT: See Draft Comments following Section 19.

[**SECTION 18. ACCEPTANCE AND DISTRIBUTION OF ELECTRONIC RECORDS BY GOVERNMENTAL AGENCIES.**

(a) Except as otherwise provided in Section 12(f), [each governmental agency] [the [designated state officer]] of this State shall determine whether, and the extent to which, [it] [a governmental agency] will send and accept electronic records and electronic signatures to and from other persons and otherwise create, generate, communicate, store, process, use, and rely upon electronic records and electronic signatures.

(b) To the extent that a governmental agency uses electronic records and electronic signatures under subsection (a), the [governmental agency] [designated state officer], giving due consideration to security, may specify:

(1) the manner and format in which the electronic records must be created, generated, sent, communicated, received, and stored and the systems established for those purposes;

(2) if electronic records must be signed by electronic means, the type of electronic signature required, the manner and format in which the electronic signature must be affixed to the electronic record, and the identity of, or criteria that must be met by, any third party used by a person filing a document to facilitate the process;

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

(4) any other required attributes for electronic records which are specified for corresponding nonelectronic records or reasonably necessary under the circumstances.

(c) Except as otherwise provided in Section 12(f), this [Act] does not require a governmental agency of this State to use or permit the use of electronic records or electronic signatures.]

Source: Illinois Act Section 25-101; Florida Electronic Signature Act, Chapter 96-324, Section 7 (1996).

DRAFT COMMENT: See Draft Comments following Section 19.

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[**SECTION 19. INTEROPERABILITY.** The [governmental agency] [designated officer] of this State which adopts standards pursuant to Section 18 may encourage and promote consistency and interoperability with similar requirements adopted by other governmental agencies of this and other States and the federal government and nongovernmental persons interacting with governmental agencies of this State. If appropriate, those standards may specify differing levels of standards from which governmental agencies of this State may choose in implementing the most appropriate standard for a particular application.]

Source: Illinois Act Section 25-115.

DRAFT COMMENTS

1. Section 17-19 have been bracketed as optional provisions to be considered for adoption by each State. Among the barriers to electronic commerce are barriers which exist in the use of electronic media by State governmental agencies - whether among themselves or in external dealing with the private sector. In those circumstances where the government acts as a commercial party, e.g., in areas of procurement, the general validation provisions of the act will apply. That is to say, the government must agree to conduct transactions electronically with vendors and customers of government services.

However, there are other circumstances when government ought to establish the ability to proceed in transactions electronically. Whether in regard to records and communications within and between governmental agencies, or with respect to information and filings which must be made with governmental agencies, these sections allow a state to establish the ground work for such electronicization.

2. The provisions in Sections 17-19 are broad and very general. In many states they will be unnecessary because those states have already enacted legislation designed to facilitate governmental use of electronic records and communications. However, in many states broad validating rules are needed and desired. Accordingly, this Act provides these Sections as a baseline.

Of paramount importance in all states however, is the need for states to assure that whatever systems and rules are adopted, the systems established are compatible with the systems of other governmental agencies and with common systems in the private sector. A very real risk exists that implementation of systems by myriad governmental agencies and offices my create barriers because of a failure to consider compatibility, than would be the case otherwise.

3. The provisions in Section 17-19 are broad and general to provide the greatest flexibility and adaptation to the specific needs of the individual states. The differences and variations in the organization and structure of governmental agencies mandates this approach. However, it is imperative that each State always keep in mind the need to prevent the erection of barriers through appropriate coordination of systems and rules within the parameters set by the State.

4. Section 17 authorizes state agencies to use electronic records and electronic signatures generally for intra-governmental purposes, and to convert written records and manual signatures to electronic records and electronic signatures. By its terms the section gives enacting legislatures the option to leave the decision to use electronic records or convert written records and signatures to the governmental agency or assign that duty to a designated state officer. It also authorizes the destruction of written records after conversion to electronic form.

5. Section 18 broadly authorizes state agencies to send and receive electronic records and signatures in dealing with non-governmental persons. Again, the provision is permissive and not obligatory (see subsection (c)). However, it does provide specifically that with respect to electronic records used for evidentiary purposes, Section 12 will apply unless a particular agency expressly opts out.

6. Section 19 is the most important section of the three. It requires governmental agencies or state officers to take account of consistency in applications and interoperability to the extent practicable when promulgating standards. This section is critical in addressing the concern that inconsistent applications may promote barriers greater than currently exist. Without such direction the myriad systems that could develop independently would be new barriers to electronic commerce, not a removal of barriers. The key to interoperability is flexibility and adaptability. The requirement of a single system may be as big a barrier as the proliferation of many disparate systems.

SECTION 20. SEVERABILITY CLAUSE. If any provision of this [Act] or its application to any person or circumstance is held invalid, the invalidity does not affect other provisions or applications of this [Act] which can be given effect without the invalid provision or application, and to this end the provisions of this [Act] are severable.

SECTION 21. EFFECTIVE DATE. This [Act] takes effect .....

