

UTCLE The University of Texas School of Law

Presented:

The University of Texas School of Law 33rd Annual Conference on Securities Regulation and Business Law

> February 10-11, 2011 Dallas, Texas

E-CORPORATE LAW

Douglas W. Clayton

Douglas W. Clayton CANTEY HANGER LLP Southlake Town Square 115 Grand Avenue, Suite 222 Southlake, Texas 76092

dclayton@canteyhanger.com 817-877-2890

Table of Contents

I.	Electronic Transactions.		
	A.	Basic Contract Principles	1
	B.	Contracts Which Must be In Writing and/or Signed	1
	C.	Purpose of Signature Requirement	3
	D.	What is a Signature?	3
	E.	Legal Response to Electronic Signature Requirement: UETA and E-Sign	4
	F.	Summary of UETA	7
	G.	Texas Adopted E-Sign Provisions	10
	Н.	Practical Considerations.	11
II.	Ele	ctronic Corporate Formalities	13
	A.	Texas Business Organizations Code	13
	B.	Delaware General Corporation Law	16
Exhi	bit A	- Texas UETA statute	
Exhi	bit B	– Federal E-Sign statute	
Exhi	khibit B – Federal E-Sign statute khibit C – Selected Provisions of Texas Business Organizations Code		
Exhi	hit D	- Selected Provisions of Delaware General Corporation Act	

E-CORPORATE LAW¹

By: Douglas W. Clayton²

The number of commercial and other transactions that are conducted electronically has risen dramatically in recent years. As new technologies have emerged, laws and common commercial practices have evolved to embrace those technologies. Legal practitioners need to be able to identify and translate fundamental concepts of contract law to the new electronic platforms. This paper outlines provisions of Texas and federal law which address directly or interpret fundamental concepts as applied to electronic transactions. It also explores the manner in which the corporate laws of Texas and Delaware have evolved to embrace the electronic age with regard to communications between corporations and their directors and shareholders for the purpose of taking corporate action by e-mail and other electronic means.

I. ELECTRONIC TRANSACTIONS

For purposes of this paper, the term "electronic transaction" will be used to refer to any agreement or transaction between two or more parties which is conducted via e-mail or other electronic communication device, including those conducted over the Internet. For example, an individual who buys a book by visiting the website of a retail bookstore has engaged in an electronic transaction. Likewise, a construction company that orders lumber from one of its suppliers by sending an e-mail or text message has engaged in an electronic transaction. How does the legal treatment of electronic transactions differ from the treatment of transactions conducted in person and/or in writing? Not very much, as we will explore in greater detail below.

A. Basic Contract Principles

As a preliminary matter, it should be noted that an electronic transaction is a contract, and virtually all principles of contract law apply in the virtual world as well as the traditional contracting world. So to be enforceable, an electronic transaction must represent a meeting of the minds of the contracting parties; there must be an offer and acceptance of the bargain; there must be an exchange of consideration; and there must be an absence of fraud, forgery, duress, mistake, or unconscionability.

B. Contracts Which Must be In Writing and/or Signed

As a general rule, a contract need not be in writing and need not be signed by either party to the contract. It is the exceptions to this general rule – contracts that the law requires to be in writing and/or signed by the parties to such contract – that created a dilemma at the dawn of the electronic era.

_

¹ The views expressed in this paper and the related presentation are solely those of the author and are not those of his firm or any other party. All materials are provided solely for educational purposes and not as legal advice.

² Douglas W. Clayton is a partner with the law firm of Cantey Hanger LLP. He would like to thank Christopher Jones, an associate with Cantey Hanger LLP, for his valuable contributions to this paper.

For example, the Texas Statute of Frauds³ requires that the following contracts be in writing and signed in order to be enforceable:

- (i) a promise by an executor or administrator to answer out of his own estate for any debt or damage due from his testator or intestate;
- (ii) a promise by one person to answer for the debt, default, or miscarriage of another person;
- (iii) an agreement made on consideration of marriage or on consideration of nonmarital conjugal cohabitation;
- (iv) a contract for the sale of real estate:
- (v) a lease of real estate for a term longer than one year;
- (vi) an agreement which is not to be performed within one year from the date of making the agreement;
- (vii) a promise or agreement to pay a commission for the sale or purchase of:
 (A) an oil or gas mining lease;
 (B) an oil or gas royalty;
 (C) minerals; or
 (D) a mineral interest; and
- (viii) agreement, promise, contract, or warranty of cure relating to medical care or results thereof made by a physician or health care provider as defined in Section 74.001, Texas Civil Practice and Remedies Code.

Another example is Article 2 (Sales) of the Uniform Commercial Code (UCC),⁴ which requires contracts for the sale of goods for a price of \$500⁵ or more to be in writing and signed in order to be enforceable.⁶

How can a party to an electronic transaction sign a document across the Internet, especially when the other party may be physically located half way around the world away? And why should it be necessary to prepare and store paper copies (with original signatures) of all of those potential electronic transactions which might take place over the Internet? Even way back in the infancy of the Internet, all that paper and ink seemed like an archaic way in which to conduct business.

_

³ Tex. Bus. & Com. Code § 26.01 (2010).

⁴ The Uniform Commercial Code has been adopted in Texas and Delaware, respectfully, as Article 2 of Texas Business and Commerce Code and Article 2 of the Delaware Commerce and Trade Code.

⁵ The Article 2 Subcommittee of the Commercial Code Committee of the Business Law Section of the State Bar of Texas has proposed that this \$500 limit be increased to \$5,000 to reflect inflation since the \$500 limit was set in 1967. *See* James H. Leeland, *Commercial Code Update*, The Business Law Section of the State Bar of Texas, January 2011 Newsletter.

⁶ Section 2.201 of the Uniform Commercial Code.

C. Purpose of Signature Requirement

To begin to answer the question of when and how a party to an electronic transaction should deliver electronic signatures, let's review the purpose of signature requirements under the law. One commentator put together the following list of nine purposes served by execution and delivery of a person's wet signature (i.e., an original writing of such person's name in the signor's own handwriting with paper and ink):

- (i) *Identification*. The addressee can verify the signer's identity by checking the signature.
- (ii) Authentication. The signature authenticates the declaration, which is included in the writing concerned. The writing reflects the facts correctly, unless evidence to the contrary is produced.
- (iii) Declaration of will. By signing the signer manifests his will and declares to be legally bound to the intention included in the writing concerned.
- (iv) *Authorization*. The signer implicitly declares being authorized to perform a legal act, for example, in case of representation.
- (v) Safeguard against undue haste. By putting one's signature to a document, the signer is notified that legal consequences may be involved. Thus, a signer is protected against undue haste.
- (vi) *Non-repudiation of origin or receipt*. The signer cannot deny that she has sent or received a document, unless proven otherwise.
- (vii) *Notice of contents*. The signer implicitly indicates that she knows the contents of the document.
- (viii) *Integrity*. Putting one's signature at the end of the document guarantees, to some extent, that the document has not been altered afterwards, thus, reducing the possibility of fraudulent actions.
- (ix) *Originality*. Signing a document distinguishes the original from a copy.⁷

D. What is a Signature?

What exactly is a signature anyway? Perhaps the reader will find it surprising that a person need not sign their name in order to have provided their signature to a contract. In fact, virtually any mark that the signer intends to serve as his signature may be deemed a signature

⁷ This list is quoted from Holly K. Towle, *E-Signatures – Basics of the U.S. Structure*, 38 Houston Law Review 921 at 926 (2001), citing B.P. Aalberts & S. van der Hof, Digital Signature Blindness, Analysis of Legislative Approaches Toward Electronic Authentication 4.3.1.1 (Nov. 1999).

under the law. For example, a person who marks "X" in a signature block may be deemed to have provided his signature if that is the signer's intent.

One prominent definition of "signed" can be found in Article 1 (General Provisions) of the UCC, which provides that it "includes using any symbol executed or adopted with present intention to adopt or accept a writing." The Comments to Section 1.201 of the UCC go on to explain: "The provision also makes it clear that, as the term 'signed' is used in the Uniform Commercial Code, a complete signature is not necessary. The symbol may be printed, stamped or written; it may be initials or thumbprint. . . No catalog of possible situations can be complete and the court must use common sense . . . The question always is whether the symbol was executed or adopted by the party with present intention to adopt or accept the writing."

The related concept of "authenticate" from Article 9 (Secured Transactions) of the UCC provides a similar definition: "(A) to sign; or (B) to execute or otherwise adopt a symbol, or encrypt or similarly process a record in whole or in part, with the present intent of the authenticating person to identify the person and adopt or accept a record." ⁹¹⁰

Similarly, the definition of an electronic signature, discussed in greater detail below, is broad enough to cover a range of acts performed by the signer to indicate the signer's desire and intent to be bound by the electronic contract.

E. Legal Response to Electronic Signature Requirement: UETA and E-Sign

Notwithstanding the broad definition of "signed" embraced by the UCC, at the dawn of the electronic age there was nonetheless quite a bit of uncertainty and hand wringing in the legal community over when, if ever, a party could meet the requirement that a document be signed with regard to electronic transactions. Electronic commerce was also hampered by the lack of clarity on this issue and the lack of consistency among the 50 states. Businesses, individuals, governments, and the legal community desired to maximize the potential of the Internet and other means of electronic communication by removing real and perceived legal barriers to electronic transactions.

1. <u>Uniform Electronic Transactions Act (UETA)</u>. An early major attempt to resolve this uncertainty was the promulgation of the Uniform Electronic Transactions Act (UETA) by the National Conference of Commissioners on Uniform State Laws in 1999. The goal of UETA was to be neutral with regard to substantive contract law, but to make clear that electronic records and electronic signatures would be deemed on par with physical records and physical signatures for the purposes of electronic transactions. The essence of UETA is found in Section 7 thereof and reads as follows:

4

⁸ See Section 1.201(b)(37) of the UCC.

⁹ See Section 9.102(a)(7) of the UCC.

¹⁰ At least one commentator has argued that this definition of "authenticate" is unduly narrow as it excludes other functions of a signature described above. *See* Towle, supra note 5, at 926-27. For our purposes, it is sufficient to note that Article 9 of the UCC provides a definition of "authenticate" that embraces symbols and other acts beyond delivery mere delivery of the signer's autograph with pen and ink.

¹¹ See Prefatory Note to UETA (1999).

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 from.
- (b) A contract may not be denied legal effect or enforceability solely because an electronic record was used at 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 ¹²
- 2. <u>Electronic Signatures in Global and National Commerce Act (E-Sign).</u>

 UETA was a big step forward, but it was not immediately adopted by all 50 states, thereby leaving in place the uncertainty of the legal effect of many electronic transactions in many jurisdictions. The result, in the opinion of the United States Congress, was that electronic commerce was being denied utilization to its full potential. Therefore, the federal government adopted the Electronic Signatures in Global and National Commerce Act (E-Sign) in June 2000 to be effective October 1, 2000.¹⁴

Like UETA, the most fundamental provision of E-Sign is the recognition of electronic contracts, signatures, and records. The critical language is contained in Section 7001(b) of E-Sign and reads as follows:

- (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.¹⁵

E-Sign required all U.S. states to either adopt UETA (or something substantially similar and consistent with E-Sign) or be subject to E-Sign. ¹⁶ If the goal was to encourage states to adopt UETA, E-Sign had its intended effect. As of the writing of this paper, 47 states, the District of Columbia, Puerto Rico, and the Virgin Islands have all adopted UETA. ¹⁷ Texas enacted UETA

¹⁴ Anthony M. Balloon, From Wax Seals to Hypertext: Electronic Signatures, Contract Formation, and a New Model for Consumer Protection in Internet Transactions, 50 Emory L.J. 905, 924 (2001).

¹² Section 7 of UETA. The complete text of UETA as adopted in Texas (Section 322 of the Texas Business and Commerce Code) is attached to this paper as Exhibit A hereto.

¹³ 15 USC § 7001 et seq.

¹⁵ 15 USC § 7001(a)(1)-(2) (2010).

¹⁶ See 15 USC § 7002

¹⁷ See chart of adopting jurisdictions at Chapter 322 of the Texas Business and Commerce Code.

in May 2001. The statute was codified in Chapter 43 of the Texas Business & Commerce Code (now Chapter 322) and took effect on January 1, 2002. 18

Now that UETA (or similar acts authorizing electronic transactions) has been adopted in virtually every jurisdiction, the ongoing impact of E-Sign on electronic contracting should be minimal. For example, the Texas UETA statute specifically provides that "This chapter modifies, limits, or supersedes the provisions of the Electronic Signatures in Global and National Commerce Act (15 U.S.C. Section 7001 et seq.) as authorized by Section 102 of that Act (15 U.S.C. Section 7002)." Notwithstanding the foregoing, in adopting UETA, Texas specifically provided that the consumer disclosure provisions of E-Sign²¹ and the exceptions to E-Sign set forth in Section 7003(b) thereof (relating to such matters as official court records and important notices and warnings), will continue to be applicable under Texas law. This paper will refer to such provisions of E-Sign as the "Texas Adopted E-Sign Provisions." 23 24 25

The precise overlap and interaction of UETA and E-Sign, particularly in states which did not adopt UETA in substantially the form of the model UETA, are beyond the scope of this paper. Needless to say, such issues are quite complex and vexing to those commentators who have had the courage to take them on. For our purposes, we will focus on UETA and the Texas

¹⁸ See Section 322.004 of Texas UETA. See National Conference of State Legislatures website at http://www.ncsl.org/default.aspx?tabid=13484 (visited January 12, 2011). Delaware adopted UETA in 2000. See Id. Three states, Illinois, New York and Washington, have not adopted the uniform act, but have statutes pertaining to electronic transactions.

¹⁹ See Section 322.019 of the Texas Business and Commerce Code.

²⁰ The Texas UETA statute makes some minor, presumably non-substantive adjustments to the model UETA, such as adjusting section numbers, cross-references, a delayed effective date, selection among option provisions, etc. While the changes individually and collectively would not seem to cause E-Sign to preempt Texas's UETA statute as contemplated by E-Sign, the author is not aware of any case law addressing this issue. The State Bar Committee Comments to Texas UETA include a self-serving statement that changes to the model UETA reflected in Texas's UETA statute "should not constitute departures from the official text of UETA sufficient to invoke preemption under [E-Sign]."

²¹ See Section 7001(c) of E-Sign.

²² See Section 7003(b) of E-Sign.

²³ See State Bar Committee Comment 3 to Texas UETA (Chapter 322 of Texas Business and Commerce Code) (citing savings provisions in Section 6 of the enacting legislation, Senate Bill 393, 77th Texas Legislature, 2001).

Texas's decision to require compliance with the consumer disclosure provisions of E-sign is somewhat curious given that one of the reasons often given for a state to adopt UETA is to avoid such consumer disclosure provisions. For example, *see* the note by the National Conference of State Legislatures on its website (*See* note 17, supra). *See* also Patricia Brumfield Fry, *Why Enact UETA? The Role of UETA After E-Sign*, The National Conference of Commissioners on Uniform State Laws website at http://www.nccusl.org/Update/Docs/Why%20Enact%20UETA.asp (visited January 12, 2011).

²⁵ At least one commentator has argued that states are unable to avoid preemption by E-Sign with regard to its consumer disclosure requirements even if such states so desire. See Mike Watson, E-commerce and E-law; Is everything E-Okay? Analysis of the Electronic Signatures in Global and National Commerce Act, 53 Baylor L. Rev 803, at 828-830 (Fall 2001).

²⁶ See, for example, Towle, supra note 6 (noting the complexity in determining whether or not a particular state's UETA statute is sufficiently similar to the model UETA to avoid preemption by E-Sign and developing an algorithm to address such issues). See also, William R. Denny, Electronic Contracting in Delaware: The E-Sign Act and the Unifrom Transactions Act, 4 Delaware Law Review 33, at 43 (2001) (noting that Delaware excluded many statutes from its UETA statute, including the Delaware General Corporation Law, and that E-Sign calls into question the validity of any state statute requiring a writing).

Adopted E-Sign Provisions.²⁷ Legal practitioners should be mindful that E-Sign may have application in certain jurisdictions and under federal law.²⁸

F. Summary of UETA.

- 1. <u>General</u>. At its heart, UETA stands for the proposition that signatures, records, and contracts may not be denied effect solely because they are in electronic form.²⁹ UETA is intended to deal merely with the procedure through with signatures, records, and contracts may be created without any intent to "substantively modify, limit, or supersede another law of [Texas]."³⁰ A "fundamental premise of [UETA] is that it be minimalist and procedural."³¹
- 2. No requirement to contract electronically. Significantly, UETA "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." In other words, UETA "applies only to transactions between parties each of which has agreed to conduct transactions by electronic means." Whether such an agreement has taken place is subject to a facts-and-circumstances inquiry. It is clear, however, that this is not a stringent standard. An agreement to conduct transaction by electronic means will be found "whenever the circumstances show the parties intention to transact electronically, regardless of whether the intent rises to the level of a formal agreement." For example, as stated in the official comments of the model UETA, it may even be reasonable for a recipient of a business card which includes a business e-mail address to infer that the individual handing out the card has agreed to conduct business electronically. Section 1.
- 3. <u>Exclusions from UETA</u>. Generally, UETA applies to all electronic signatures, records, and contracts." UETA does not apply, however, to the following documents and instruments:
 - (1) a law governing the creation and execution of wills, codicils, or testamentary trusts; or
 - (2) the Uniform Commercial Code, other than Sections 1.107 [now Section 1.306]³⁸ and 1.206 [former Section 1.206 has been repealed] and Article 2 [Sales] and Article 2A [Leases].³⁹

²⁸ See Towle, supra note 6 (noting that E-Sign continues to apply with regard to disclosure obligations under federal law, such as federal Truth-In-Lending disclosure obligations).

³⁵ *Id.* at Official Cmt. (B).

²⁷ See supra note 22.

²⁹ See Balloon, supra note 13, at 909.

³⁰ See State Bar Committee Comment 1 to Texas UETA statute.

³¹ Official Comment (B) to Texas UETA statute (Vernon Supp. 2010).

³² See Section 322.005(a) of Texas UETA (Vernon 2009).

³³ *Id.* at § 322.005(b).

 $^{^{34}}$ Id

³⁶ Such an inference seems like a stretch to the author. Other commentators have expressed similar skepticism. *See* Denny, supra note 25, at 38. In any event, it would appear to be quite easy for a party to show another party's consent to contract electronically. Practical tip: a person who does not wish to do business electronically should refrain from handing out business cards to the authors of the model UETA.

³⁷ §322.003(a).

Although the parties to a real estate transaction are free to enter into agreements by means of electronic communications and such agreements are binding as between the parties themselves, deeds and other documents which must be filed of record in the applicable counties to put the rest of the world on notice of such transactions must still comply with local real property filing requirements.⁴⁰ Such filing requirements may include a requirement that filed documents include a notarized original signature.

- 4. <u>Definition of Electronic Signature</u>. As with the definition of "signed" in Article 1 of the UCC, ⁴¹ UETA broadly defines "electronic signature" to mean "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 a record." On the Internet today, that usually means clicking a box that says "Submit" or "I accept."
- 5. Concept of electronic agent and automated transactions. **UETA** recognizes that when two computers talk to one another over the Internet, there is no true "meeting of the minds" of real people as contemplated by traditional contract law. Likewise, when one individual logs onto a website and purchases a product, he hasn't really had a "meeting of the minds" with the computer on the other side of the transaction. Nonetheless, a valid electronic contract can be reached between so-called "electronic agents" of the parties, even if any or all of the parties are represented by electronic agents. 43 "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 of forming a contract, performing under an existing contract, or fulfilling an obligation required by the transaction" is referred to as an "automated transaction" under UETA. 44 UETA defines an "electronic agent" to mean "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."45
- 6. <u>Electronic records to meet "writing" requirement</u>. If parties agree to conduct business electronically, a legal requirement that information be delivered in "writing" is met if the sender provides "an electronic record capable of retention by the recipient at the time of receipt." 46 47

³⁸ This provision deals with waiver of a claim or right after breach without consideration. As amended by the Texas legislature in 2003, Section 1-306 specifically permits such a waiver by an "authenticated record," so the application of UETA to this provision should be a bit like wearing a belt and suspenders.

³⁹ See Section 322.003(b) of Texas UETA.

⁴⁰ See State Bar Committee Comment 2 to Section 322.003 of Texas UETA.

⁴¹ See supra note 7, above.

⁴² Section 322.002(8) of Texas UETA.

⁴³ See Section 322.014 of Texas UETA.

⁴⁴ Section 322.002(2) of Texas UETA.

⁴⁵ Section 322.002(6) of Texas UETA.

⁴⁶ Section 322.008(a) of Texas UETA.

⁴⁷ There is some ambiguity whether or not the recipient must be able to retain an electronic record in fact or in theory. For example, if a person chose to order a pair of jeans through a website accessed with the buyer's

7. Attribution issues and security procedures. As noted above, one of the purposes of an original signature in the non-electronic world is that it helps identify the signer. When dealing with face-to-face, in-person transactions, further attribution procedures are unnecessary. For example, you know that Miley Cyrus signed a certain document because you were sitting across the table from her as she signed. With the advent of electronic mediums, however, attribution procedures have become critical to the security, and ultimately the success, of business transactions conducted every day.

The Texas UETA recognizes that participants in electronic transactions may adopt so-called "security procedures" for "verifying that an electronic signature, record, or performance is that of a specific person or 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 acknowledgement procedures." Importantly, UETA does not mandate the use of any particular security procedures, or any security procedure at all. UETA merely provides that "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 the showing of the efficacy of any security procedure applied to determine the person to which the electronic record or electronic signature was attributable." Whether or not attribution to a particular person is appropriate in a particular case is subject to a facts and circumstances inquiry. The actual security procedures can be as simple or as sophisticated as the parties deem appropriate. Possible security procedures include passwords, numbers, secret codes, retinal scans, digital fingerprints, encryption, algorithms, smart cards, or callback or other acknowledgement.

- 8. <u>Effect of Change or Error</u>. Because it is so easy to "click" one's way into an electronic agreement by mistake, UETA provides a procedure for a participant in an electronic transaction to correct an error in an electronic transaction by promptly notifying the other party.⁵³ Those error correction rules do not apply in cases where a party fails to comply with pre-agreed upon security procedures or a party has had a prior opportunity to prevent or correct their error.⁵⁴ This provision is one reason why most Internet retailors ask shoppers to review and confirm their order a second time before the transaction is complete.⁵⁵
- 9. <u>Notarization</u>. UETA provides that a notary requirement in another law may be satisfied by electronic means also.⁵⁶

smartphone that lacked printing capabilities, would that invalidate the transaction even if the website would allow printing of receipts if the website was accessed by a desktop connected to a laser printer. It seems unlikely that the validity of the contract would turn on whether or not one party's electronic device was connected to a printer at the time an order was placed. *See* Denny, supra note 25 at 41-42.

⁴⁸ See Section 322.002(13) of Texas UETA.

⁴⁹ See Section 322.009 of Texas UETA.

⁵⁰ *Id.* at (a).

⁵¹ *Id*.

⁵² See Section 322.009(b) of Texas UETA.

⁵³ See Section 322.010 of Texas UETA.

⁵⁴ See Section 322.010(b) and (c) of Texas UETA.

⁵⁵ See Watson, supra note 24 at 832.

⁵⁶ See Section 322.011 of Texas UETA.

- Electronic Records. Under UETA, an electronic record is just as valid as a written record so long as such electronic record "(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."⁵⁷ Such records will be considered an "original" unless a law adopted after January 1, 2002 specifically prohibits electronic record keeping.⁵⁸ With regard to records requiring a single original, such as a negotiable promissory note, an electronic record of such record is acceptable so long as an electronic system is capable of reliably tracking such record as the transferable authoritative original and a single person has control of such record.⁵⁹
- Mailbox rules. Section 322.015 of UETA provides mailbox rules for 11. sending and receiving electronic offers and acceptances and the distribution of electronic records.
- 12. Exclusion for government agencies. Section 322.017 of UETA provides that governmental agencies have the authority to determine whether or not to accept electronic records and electronic signatures.

G. Texas Adopted E-Sign Provisions.

As discussed above, although the Texas UETA statute should not be preempted by E-Sign, the Texas legislature specifically chose to adopt certain provisions of E-Sign, which this paper has referred to as the Texas Adopted E-Sign Provisions. Such provisions can be summarized as follows.

- Consumer disclosure provisions of E-Sign. Texas has adopted the 1 following consumer disclosure provisions set forth in Section 7001(c) of E-Sign. That section provides that if any law otherwise requires a that information be delivered to a consumer in writing, then such information may not be delivered in electronic format unless:
 - a. The consumer has consented to such electronic delivery and has not revoked such consent;
 - b. Prior to consenting, the consumer received a clear and conspicuous statement (1) that the consumer has the option to choose paper or electronic notice, that the consumer may withdrawal such consent, and that the consequences of any such withdrawal; (2) informing the consumer of the scope of its consent; (3) informing the consumer of procedures to withdrawal such consent; and (4) informing the consumer how it may obtain a paper copy and the cost of such paper copy;
 - c. The consumer is informed of the hardware and software requirements to communicate electronically, and the consumer consents in a manner

10

 ⁵⁷ Section 322.012(a) of Texas UETA.
 ⁵⁸ Section 322.012(d) and (f) of Texas UETA.
 ⁵⁹ See Section 322.016 of Texas UETA.

- demonstrating that the consumer meets such hardware and software requirements; and
- d. Upon a change in the hardware or software requirements for the consumer, the consumer is informed of the change and given an opportunity to opt-out of electronic correspondence without any cost to the consumer.
- 2. <u>Prohibited electronic delivery of certain notices</u>. Section 7003(b) of E-Sign (incorporated into Texas state law pursuant to Section 1.108 of the Texas Business and Commerce Code) prohibits electronic delivery of any of the following notices:
 - a. court orders or notices, or official court documents (including briefs, pleadings, and other writings) required to be executed in connection with court proceedings;
 - b. 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
 - c. any document required to accompany any transportation or handling of hazardous materials, pesticides, or other toxic or dangerous materials.

H. Practical Considerations.

- 1. <u>Problems of Attribution</u>. Attribution is perhaps the most challenging aspects of doing business electronically and the area in which the law provides perhaps the least amount of guidance. Participants in electronic commerce would be wise to carefully consider the appropriate security procedures with which to subject incoming electronic messages from other parties. Otherwise, for example, the other party might claim he or she never sent that e-mail requesting delivery of 500 pizzas with anchovies. Of course, as the size of the electronic transaction increases, the security procedures should grow more sophisticated as well.
- 2. <u>Agreement to Use E-Commerce</u>. On one hand, UETA has made it easier to bind a party to an electronic contract, even contracts that were previously required to be in writing and/or signed. On the other hand, UETA will not bind a party that has not consented to doing business electronically. Thus, parties to potential business transactions would be wise to make it crystal clear whether or not they intend to use electronic communications to transact

business. One commentator has suggested that every new business relationship begin with one or the other of the following e-mail messages:⁶⁰

To agree to conduct business electronically:

This e-mail transmission constitutes clear, convincing and conclusive evidence that the sender intends to enter into an agreement with the recipient(s) to conduct this transaction electronically and, by transmitting this e-mail, hereby invokes the Uniform Electronic Transactions Act, as set forth in Chapter 322 of the Texas Business & Commerce Code, a corresponding statute of a sister state or, alternatively, Title 15, Chapter 96, Subchapter I of the United Sates Code (§15 U.S.C. §7001, et seq.).

To decline to conduct business electronically:

This sender of this e-mail expressly, specifically and conclusively disclaims, disavows and renounces the effect, application and consequences of the Uniform Electronic Transactions Act, as set forth in Chapter 322 of the Texas Business & Commerce Code, a corresponding statute of a sister state or Title 15, Chapter 96, Subchapter I of the United States Code (§15 U.S.C. §7001, et seq.).

This e-mail transmission shall not be construed to constitute or memorialize an agreement with the recipient(s) to conduct, consummate or complete this or any other transaction electronically or by electronic means.

- 3. <u>Include error correction opportunity</u>. As noted above, UETA gives parties to an electronic transaction the opportunity to correct transactions entered into in error. To avoid having counter-parties to electronic transactions trying to weasel out of contracts, parties should ensure that their websites and their other electronic agents give their customers an immediate opportunity to review their orders and confirm (or correct) their submission at the time of the initial order
- 4. <u>E-Sign consumer disclosures</u>. When developing a website or other electronic agent to engage in electronic transactions with consumers, a business should be sure to comply with the consumer disclose requirements described in Section I.G.(1) above.
- 5. <u>Electronic notice provisions</u>. Legal practitioners should consider including e-mail as an acceptable method in which to provide notices permitted or required in agreements, whether or not the agreements themselves are entered into electronically. A sample e-mail notice provision might read as follows [emphasis added]:

Notices. Any notices, consents, waivers or other communications required or permitted to be given under the terms hereof must be in writing and will

_

⁶⁰ See Mitchell Murphy, *Uniform Electronic Transactions as Applied to Oil and Gas*, presented at K&L Gates Fifth Annual Fort Worth Oil and Gas Seminar, November 11, 2009.

be deemed to have been delivered: (a) upon receipt, when delivered personally; (b) upon receipt, when sent by facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); (c) upon receipt, when sent by email (provided confirmation of transmission is electronically generated and kept on file by the sending party), or (d) one (1) business day after deposit with a nationally recognized overnight courier, in each case properly addressed to the party to receive the same. The addresses, facsimile numbers, and e-mail addresses for such communications shall be as set forth on the signature pages hereto or at such other address, facsimile number, and/or e-mail address, and/or to the attention of such other person as the recipient party has specified by written notice (including a notice delivered via facsimile or e-mail) given to each other party. Written confirmation of receipt (i) given by the recipient of such notice, consent, waiver or other communication, (ii) mechanically or electronically generated by the sender's facsimile machine containing the time, date, recipient facsimile number and an image of the first page of such transmission, (iii) electronically generated by the sender's e-mail account containing the time, date, recipient's e-mail address and an image of such transmission, or (iv) provided by a nationally recognized overnight delivery service, shall be rebuttable evidence of personal service, receipt by facsimile, receipt of e-mail, or receipt from a nationally recognized overnight delivery service in accordance with clauses (a), (b), (c), or (d) above, respectively.

II. ELECTRONIC CORPORATE FORMALITIES

A. Texas Business Organizations Code

The Texas Business Organizations Code (TBOC) has been recently updated to explicitly permit corporations and other business entities to communicate with their directors and shareholders through electronic means and to take action by though electronic communication. While arguably the provisions of the TBOC requiring writings and signatures are governed by UETA anyway, the TBOC now explicitly embraces the same concepts as UETA.

- 1. <u>Certain Definitions</u>. First, it should be noted that the TBOC defines certain terms as follows:
 - a. "Electronic transmission" means a form of communication that: (A) does not directly involve the physical transmission of paper; (B) creates a record that may be retained, retrieved, and reviewed by the recipient; and (C) may be directly reproduced in paper form by the recipient through an automated process.
 - b. "Signature" means any symbol executed or adopted by a person with present intention to authenticate a writing. Unless the context requires

otherwise, the term includes a digital signature, an electronic signature, and a facsimile of a signature. ⁶¹

2. <u>Action by Directors and Shareholders Through Electronic Consents.</u> Section 6.205(b) of the TBOC provides as follows:

Except as otherwise provided by an entity's governing documents, an electronic transmission of a consent by an owner, member, or governing person to the taking of an action by the entity is considered a signed writing if the transmission contains or is accompanied by information from which it can be determined:

- (1) that the electronic transmission was transmitted by the owner, member, or governing person; and
- (2) the date on which the owner, member, or governing person transmitted the electronic transmission. 62

In order to take advantage of such provision, corporations and other business entities should review their governing documents to confirm that they do not contain any provision contrary to Section 6.205(b) of the TBOC. Ideally, the governing documents would explicitly permit electronic transmission of consents to remove any ambiguity on this issue.

To effectuate an electronic consent pursuant to Section 6.205(b) of the TBOC, the corporation might send an e-mail which includes a formal written consent to each of its directors or shareholders, as applicable, requesting their consent to a corporate action. The directors or shareholders, as applicable, could reply to such e-mail with a brief indication of their consent, such as: "I approve the resolutions set forth below. /s/ Justin Bieber." The reply e-mails could then be printed and placed in the corporate minute book.

3. <u>Notices of Meetings of Directors and Shareholders</u>. Section 21.3531 of the TBOC (with regard to shareholders) and Section 21.411 of the TBOC (with regard to directors) permits notice of meetings by electronic transmission with the consent of the applicable director or shareholder. Any such consent of a director or shareholder may be revoked at any time by written notice to the company. Corporation and other business entities should review their governing documents to confirm their notice provisions are consistent with Sections 21.3531 and 21.411 of the TBOC.

Corporations and other business entities should also consider requesting a consent to electronic notice from each director and shareholder when such person first becomes a director and/or shareholder. Such a consent might look like the following:

.

⁶¹ Section 1.002(20-a) and (82) of the TBOC.

⁶² Tex. Bus. Org. Code Ann. § 6.205 (b)-(c) (West 2009).

Approval of Electronic Notice

WHEREAS, pursuant to Section [__] of the Bylaws of the Company, a Director or Shareholder of the Company may consent to the Company's delivery of notice to Directors and Shareholders of the Company by electronic transmission;

RESOLVED, that with respect to any notice required or permitted to be delivered by the Company to the undersigned in their capacities as Directors and/or Shareholders of the Company, each of the undersigned Directors and Shareholders hereby consents to notice by e-mail at the e-mail address set forth next to the name of such Director and Shareholder below:

NAME OF DIRECTOR AND/OR SHAREHOLDER	E-MAIL ADDRESS
Joe Jonas	jjonas@brothers.com
Nick Jonas	njonas@brothers.com
Kevin Jonas	kjonas@brothers.com

- 4. <u>Alternative Forms of Meetings</u>. Section 6.002 of the TBOC permits corporations and other business entities to conduct meetings of their directors or shareholders by conference telephone or "other suitable electronic communications system, including video conferencing or the Internet" if such system "permits all persons participating in the meeting to communicate with all other persons participating in the meeting." Corporations and other business entities should review their governing documents to confirm that they do not contain any provision contrary to Section 6.002 of the TBOC.
- 5. <u>Proxy Voting</u>. Section 21.367 of the TBOC permits a shareholder to vote by written proxy. Section 21.367(b) of the TBOC explains that "a telegram, telex, cablegram, or other form of electronic transmission, including telephonic transmission, by the shareholder, or a photographic, photostatic, facsimile, or similar reproduction of a writing executed by the shareholder, is considered an execution in writing for purposes of this section." However, "any electronic transmission must contain or be accompanied by information from which it can be determined that the transaction was authorized by the shareholder." A corporation whose shareholders wish to vote by proxy should take care that such voting complies with Section 21.367.
- 6. <u>Shareholder List.</u> Section 21.372 of the TBOC requires corporations to prepare an alphabetical list of shareholders entitled to vote at a shareholders meeting at least 11 days before the date of such meeting. The list should include the address, type of shares held, number of shares held, and number of votes held (if different from number of shares held) for each shareholder. The list may either be kept at the corporation's registered office or its principal executive office or "on a reasonably accessible electronic network if the information

_

⁶³ Section 31.372(a)(1) of TBOC.

required to gain access to the list is provided with notice of the meeting."64 Corporations are not required to that any electronic contact information be included on the list.⁶⁵ If a corporation chooses to make its shareholders list accessible electronically, the corporation must "take reasonable measures to ensure the information is available only to shareholders of the corporation."66

B. Delaware General Corporation Law.

General. Navigating Delaware corporate law with regard to treatment of electronic transactions and electronic signatures can be a challenge. On the one hand, Title 1 (General Provisions) of the Delaware Code defines "written" and "writing" to "include printing and typewriting and reproductions of visual symbols by photographing, lithographing, multigraphing, mimeographing, manifolding or otherwise; but in all cases where the written signature of any person is by law required, it shall be the proper handwriting of such person, or if the person cannot write the person's name, the person's mark."⁶⁷

On the other hand, Delaware has adopted the UETA, which, as discussed above, provides that:

- 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. ⁶⁸

But wait - Section 12A-103 of the Delaware UETA specifically excludes the Delaware General Corporation Law (DGCL) from the scope of UETA. Does excluding the DGCL from the scope of Delaware UETA thereby subject the DGCL to the federal E-Sign provisions under its preemption rules? Probably so, to the extent the DGCL is inconsistent with E-Sign.⁶⁹

Fortunately, the DGCL itself has been amended to embrace many of the concepts of UETA and E-Sign, so any discussion of which of the interaction of statues describe above is largely irrelevant with regard to corporate actions governed by the DGCL. Thus, practitioners (and this author) are free to focus on the provisions of the DGCL for guidance with regard to corporate actions through electronic means.

⁶⁴ Section 31.372(a)(2) and (a-1) of TBOC.

⁶⁵ Section 31.373(a-1) of TBOC.

⁶⁶ *Id*.

⁶⁷ 1 Del. Code Ann. § 302(23) (2010).

^{68 6} Del. Code Ann. §12A-107 (2010).

⁶⁹ See Denny, supra note 25 at 43-44.

Action by Directors and Shareholders Through Electronic Consents. As in Texas, directors of a Delaware corporation may take action through delivery of "written" consents by electronic transmission. Section 141(f) of the DGCL provides as follows:

> Unless otherwise restricted by the certificate of incorporation or bylaws, any action required or permitted to be taken at any meeting of the board of directors or of any committee thereof may be taken without a meeting if all members of the board or committee, as the case may be, consent thereto in writing, or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the board, or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 228(d)(1) of the DGCL provides an analogous provision for shareholders acting through electronic "written" consents. Any electronic consent delivered by shareholder must be accompanied with information from which the corporation can determine that the electronic consent was transmitted by the shareholder and the date of such transmission.⁷⁰

- Notices of Meetings of Directors and Shareholders. Stockholders of a Delaware corporation may consent to notice by electronic transmission, and they may revoke such consent at any time by providing written notice to the corporation.⁷¹ Any such consent by a stockholder shall be deemed revoked if the corporation becomes aware that it has been unable to deliver 2 consecutive electronic notices to such stockholder.⁷² The author was unable to find a provision of the DGCL addressing requirements for delivery of notice to directors of a Delaware corporation, whether by electronic means or otherwise.
- Alternative Forms of Meetings. Section 141(i) of the DGCL permits 4. meetings of directors by "conference telephone or other communications equipment." Section 211(a)(2) of the DGCL permits stockholders of a Delaware corporation to participate in stockholder meetings "by means of remote communication" "[i]f authorized by the board of directors in its sole discretion."
- Proxy Voting. Section 212 of the DGCL permits a stockholder of a Delaware corporation to grant a proxy by electronic transmission, so long as such proxy includes "information from which it can be determined that the . . . electronic transmission was authorized by the stockholder." The statute is silent as to what sort of information would support such a determination.
- Shareholder List. Section 219 of the DGCL permits stockholder lists to be made available on a "reasonably accessible electronic network."

⁷⁰ Section 228(d)(1) of DGCL.

⁷¹ Section 232(a) of DGCL. 72 *Id*.

Exhibit A

Texas Uniform Electronic Transactions Act

§ 322.001. Short Title

This chapter may be cited as the Uniform Electronic Transactions Act.

§ 322.002. Definitions

In this chapter:

- (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 chapter 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) "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.
- (13) "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.

- (14) "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.
- (15) "Transaction" means an action or set of actions occurring between two or more persons relating to the conduct of business, commercial, or governmental affairs.

§ 322.003. Scope

- (a) Except as otherwise provided in Subsection (b), this chapter applies to electronic records and electronic signatures relating to a transaction.
 - (b) This chapter 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; or
- (2) the Uniform Commercial Code, other than Sections 1.107 [now Section 1.306] and 1.206 [former Section 1.206 has been repealed] and Chapters 2 and 2A.
- (c) This chapter applies to an electronic record or electronic signature otherwise excluded from the application of this chapter under Subsection (b) when used for a transaction subject to a law other than those specified in Subsection (b).
 - (d) A transaction subject to this chapter is also subject to other applicable substantive law.

§ 322.004. Prospective Application

This chapter applies to any electronic record or electronic signature created, generated, sent, communicated, received, or stored on or after January 1, 2002.

§ 322.005. Use of Electronic Records and Electronic Signatures; Variation by Agreement

- (a) This chapter 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 chapter 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 chapter, the effect of any of its provisions may be varied by agreement. The presence in certain provisions of this chapter 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 chapter and other applicable law.

§ 322.006. Construction and Application

This chapter 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 chapter among states enacting it.

§ 322.007. 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.

§ 322.008. 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 chapter 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; and
 - (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 chapter 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 chapter to send, communicate, or transmit a record by first class mail may be varied by agreement to the extent permitted by the other law.

§ 322.009. 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.

§ 322.010. Effect of Change or Error

- (a) If a change or error in an electronic record occurs in a transmission between parties to a transaction, the rules provided by this section apply.
- (b) 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.
- (c) 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:
- (1) 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;
- (2) 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
- (3) has not used or received any benefit or value from the consideration, if any, received from the other person.
- (d) If neither Subsection (b) nor Subsection (c) applies, the change or error has the effect provided by other law, including the law of mistake, and the parties' contract, if any.
 - (e) Subsections (c) and (d) may not be varied by agreement.

§ 322.011. 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.

§ 322.012. 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 January 1, 2002, 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.

§ 322.013. Admissibility in Evidence

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

§ 322.014. Automated Transaction

- (a) In an automated transaction, the rules provided by this section apply.
- (b) 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.
- (c) 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.
 - (d) The terms of the contract are determined by the substantive law applicable to it.

§ 322.015. 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 the 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 the 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; and
- (2) if the sender or the recipient does not have a place of business, the place of business is the sender's or the 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.

§ 322.016. Transferable Records

- (a) In this section, "transferable record" means an electronic record that:
- (1) would be a note under Chapter 3, or a document under Chapter 7, 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 Subdivisions (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, 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 9.330 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.

§ 322.017. Acceptance and Distribution of Electronic Records by Governmental Agencies

- (a) Except as otherwise provided by Section 322.012(f), each state agency shall determine whether, and the extent to which, the 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 state agency uses electronic records and electronic signatures under Subsection (a), the Department of Information Resources and Texas State Library and Archives Commission, pursuant to their rulemaking authority under other law and 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 322.012(f), this chapter does not require a governmental agency of this state to use or permit the use of electronic records or electronic signatures.

§ 322.018. Interoperability

The Department of Information Resources 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.

§ 322.019. Exemption to Preemption by Federal Electronic Signatures Act

This chapter modifies, limits, or supersedes the provisions of the Electronic Signatures in Global and National Commerce Act (15 U.S.C. Section 7001 et seq.) as authorized by Section 102 of that Act (15 U.S.C. Section 7002).

§ 322.020. Applicability of Penal Code

This chapter does not authorize any activity that is prohibited by the Penal Code.

§ 322.021. Certain Requirements Considered to Be Recommendations

Any requirement of the Department of Information Resources or the Texas State Library and Archives Commission under this chapter that generally applies to one or more state agencies using electronic records or electronic signatures is considered to be a recommendation to the comptroller concerning the electronic records or electronic signatures used by the comptroller. The comptroller may adopt or decline to adopt the recommendation.

Exhibit B

E-Sign - 15 USCS § 7001

§ 7001. General rule of validity

- (a) In general. Notwithstanding any statute, regulation, or other rule of law (other than this title and title II [15 USCS §§ 7001 et seq. and 15 USCS § 7021]), 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 [15 USCS §§ 7001 et seq.] 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 [15 USCS § 7001 et seq.] 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 [enacted June 30, 2000] 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 [15 USCS §§ 7001 et seq.] 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 [15 USCS §§ 7001 et seq. and 15 USCS § 7021] 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.

§ 7002. 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 [15 USCS § 7001] 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 [15 USCS § 7001 et seq. or 15 USCS § 7021], 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 [15 USCS §§ 7001 et seq. and 15 USCS § 7021]; 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 [enacted June 30, 2000], makes specific reference to this Act [15 USCS §§ 7001 et seq. and 47 USCS § 231 note].
- (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 [15 USCS §§ 7001 et seq. or 15 USCS § 7021] through the imposition of nonelectronic delivery methods under section 8(b)(2) of the Uniform Electronic Transactions Act.

§ 7003. Specific exceptions

- (a) Excepted requirements. The provisions of section 101 [15 USCS § 7001] 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 [15 USCS § 7001] 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 [enacted June 30, 2000], 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 [15 USCS § 7001] to the exceptions identified in such finding.

§ 7004. Applicability to Federal and State governments

- (a) Filing and access requirements. Subject to subsection (c)(2), nothing in this title [15 USCS §§ 7001 et seq.] 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 [15 USCS § 7001] 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 [15 USCS § 7001] from adopting any regulation, order, or guidance described in paragraph (1), unless--
 - (A) such regulation, order, or guidance is consistent with section 101 [15 USCS § 7001];

- (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) [15 USCS § 7001(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) [15 USCS § 7001(d)].
- (B) Paper or printed form. Notwithstanding subsection (c)(1), a Federal regulatory agency or State regulatory agency may interpret section 101(d) [15 USCS § 7001(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) [44 USCS § 3504 note].
 - (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) [15 USCS § 7001(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 [enacted June 30, 2000], the Securities and Exchange Commission shall issue a regulation or order pursuant to paragraph (1) exempting from section 101(c) [15 USCS § 7001(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 [15 USCS § 77b(a)(10)(a)].
- (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.

§ 7005. Studies

- (a) Delivery. Within 12 months after the date of the enactment of this Act [enacted June 30, 2000], 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 [enacted June 30, 2000], 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) [15 USCS § 7001(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) [15 USCS § 7001(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.

§ 7006. Definitions

For purposes of this title [15 USCS § 7001 et seq.]:

- (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.

§ 7021. 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 [15 USCS § 7006].

- (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.

§ 7031. 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 [15 USCS § 7001]. 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 [15 USCS § 7006].

Exhibit C

Selected Provisions of Texas Business Organizations Code

§ 1.002. Definitions

In this code:

* * *

- (20-a) "Electronic transmission" means a form of communication that:
 - (A) does not directly involve the physical transmission of paper;
 - (B) creates a record that may be retained, retrieved, and reviewed by the recipient; and
 - (C) may be directly reproduced in paper form by the recipient through an automated process.

* * *

(82) "Signature" means any symbol executed or adopted by a person with present intention to authenticate a writing. Unless the context requires otherwise, the term includes a digital signature, an electronic signature, and a facsimile of a signature.

* * *

- (89) "Writing" or "written" means an expression of words, letters, characters, numbers, symbols, figures, or other textual information that is inscribed on a tangible medium or that is stored in an electronic or other medium that is retrievable in a perceivable form. Unless the context requires otherwise, the term:
 - (A) includes stored or transmitted electronic data, electronic transmissions, and reproductions of writings; and
 - (B) does not include sound or video recordings of speech other than transcriptions that are otherwise writings.

* * *

Revisor's Notes. -

* * *

Subsection (82): The revised law has modernized and clarified current definitions of "signature" to include digital, as well as electronic and facsimile, signatures by defining "signature" to mean any symbol executed or adopted by a person with present intention to authenticate a writing and include a digital signature, an electronic signature, and a facsimile of such. It is derived from the Uniform Electronic Transactions Act, the Texas Miscellaneous Corporation Laws Act, the Texas Revised Limited Partnership Act, the Texas Revised Partnership Act, the Code Construction Act, and the Information Resources Management Act. This definition enables electronic filings. The term "electronic signature" in this definition should be construed to have the meaning assigned to it in the Uniform Electronic Transactions Act, Section 43.002(8), Business & Commerce Code. The term "digital signature" in this definition should be construed to have the meaning assigned to it in Section 2054.060(e)(1), Government Code.

* * *

Subsection (89): The terms "writing" and "written" are defined in a manner that parallels the definition of "record" in the Uniform Electronic Transactions Act and is consistent with other provisions in the Uniform Electronic Transactions Act, the Government Code, and the Business & Commerce Code. Consequently, these terms are

modernized and clarified to encompass textual information stored in an electronic or other medium that is retrievable in a perceivable form, and include electronic data and transmissions and reproductions of writings. These terms do not include sound or video recordings.

* * *

§ 4.001. Signature and Delivery

- (a) A filing instrument must be:
- (1) signed by a person authorized by this code to act on behalf of the entity in regard to the filing instrument; and
- (2) delivered to the secretary of state in person or by mail, courier, facsimile or electronic transmission, or any other comparable form of delivery.
- (b) A person authorized by this code to sign a filing instrument for an entity is not required to show evidence of the person's authority as a requirement for filing.

* * *

§ 4.003. Filing or Issuance of Reproduction or Facsimile

- (a) A photographic, photostatic, facsimile, electronic, or similar reproduction of a filing instrument, signature, acknowledgment of filing, or communication may be filed or issued in place of:
 - (1) an original filing instrument;
 - (2) an original signature on a filing instrument; or
- (3) an original acknowledgment of filing or other written communication from the secretary of state relating to a filing instrument.
- (b) To the extent any filing or action on a filing conforms to this subchapter, a filing instrument or an acknowledgment of filing issued by the secretary of state is not required to be on paper or to be reduced to printed form

* * *

§ 6.002. Alternative Forms of Meetings

- (a) Subject to this code and the governing documents of a domestic entity, the owners, members, or governing persons of the entity, or a committee of the owners, members, or governing persons, may hold meetings by using a conference telephone or similar communications equipment, or another suitable electronic communications system, including videoconferencing technology or the Internet, or any combination, if the telephone or other equipment or system permits each person participating in the meeting to communicate with all other persons participating in the meeting.
- (b) If voting is to take place at the meeting, the entity must:
- (1) implement reasonable measures to verify that every person voting at the meeting by means of remote communications is sufficiently identified; and
 - (2) keep a record of any vote or other action taken.

* * *

§ 6.051. General Notice Requirements

- (a) Subject to this code and the governing documents of the entity, notice of a meeting of the owners, members, or governing persons of a domestic entity, or a committee of the owners, members, or governing persons, must:
- (1) be given in the manner determined by the governing authority of the entity; and
- (2) state the date and time of the meeting and:
- (A) if the meeting is not held solely by using a conference telephone or other communications system authorized by Section 6.002, the location of the meeting; or
- (B) if the meeting is held solely or in part by using a conference telephone or other communications system authorized by Section 6.002, the form of communications system to be used for the meeting and the means of accessing the communications system.
- (b) Subject to this code and the governing documents of a domestic entity, notice of a meeting that is:
- (1) mailed is considered to be given on the date notice is deposited in the United States mail with postage paid in an envelope addressed to the person at the person's address as it appears on the ownership or membership records of the entity; and
- (2) transmitted by facsimile or electronic message is considered to be given when the facsimile or electronic message is transmitted to a facsimile number or an electronic message address provided by the person, or to which the person consents, for the purpose of receiving notice.

* * *

§ 6.205. Reproduction or Electronic Transmission of Consent

- (a) Any photographic, photostatic, facsimile, or similarly reliable reproduction of a consent in writing signed by an owner, member, or governing person of a filing entity may be substituted or used instead of the original writing for any purpose for which the original writing could be used, if the reproduction is a complete reproduction of the entire original writing.
- (b) Except as otherwise provided by an entity's governing documents, an electronic transmission of a consent by an owner, member, or governing person to the taking of an action by the entity is considered a signed writing if the transmission contains or is accompanied by information from which it can be determined:
 - (1) that the electronic transmission was transmitted by the owner, member, or governing person; and
 - (2) the date on which the owner, member, or governing person transmitted the electronic transmission.
- (c) Unless the consent is otherwise dated, the date specified in Subsection (b)(2) is the date on which the consent is considered signed.

* * *

§ 21.3531. Notice by Electronic Transmission

(a) On consent of a shareholder, notice from a corporation under this code, the certificate of formation, or the bylaws may be provided to the shareholder by electronic transmission. The shareholder may specify the form of electronic transmission to be used to communicate notice.

- (b) Notice is considered provided under this section when the notice is:
 - (1) transmitted to a facsimile number provided by the shareholder for the purpose of receiving notice;
 - (2) transmitted to an electronic mail address provided by the shareholder for the purpose of receiving notice;
- (3) posted on an electronic network and a message is sent to the shareholder at the address provided by the shareholder for the purpose of alerting the shareholder of a posting; or
 - (4) communicated to the shareholder by any other form of electronic transmission consented to by the shareholder.
- (c) A shareholder may revoke the shareholder's consent to receive notice by electronic transmission by providing written notice to the corporation. The shareholder's consent is considered revoked for purposes of Subsection (a) if the corporation is unable to deliver by electronic transmission two consecutive notices, and the secretary, assistant secretary, or transfer agent of the corporation, or another person responsible for delivering notice on behalf of the corporation, knows that delivery of those two electronic transmissions was unsuccessful. Inadvertent failure to treat the unsuccessful transmissions as a revocation of the shareholder's consent does not affect the validity of a meeting or other action.
- (d) An affidavit of the secretary, assistant secretary, transfer agent, or other agent of a corporation stating that notice has been provided to a shareholder of the corporation by electronic transmission is, in the absence of fraud, prima facie evidence that the notice was provided under this section.

* * *

§ 21.367. Voting in Person or by Proxy

- (a) A shareholder may vote in person or by proxy executed in writing by the shareholder.
- (b) A telegram, telex, cablegram, or other form of electronic transmission, including telephonic transmission, by the shareholder, or a photographic, photostatic, facsimile, or similar reproduction of a writing executed by the shareholder, is considered an execution in writing for purposes of this section. Any electronic transmission must contain or be accompanied by information from which it can be determined that the transmission was authorized by the shareholder.

* * *

§ 21.372. Shareholder Meeting List

- (a) Not later than the 11th day before the date of each meeting of the shareholders of a corporation, an officer or agent of the corporation who is in charge of the corporation's share transfer records shall prepare an alphabetical list of the shareholders entitled to vote at the meeting or at any adjournment of the meeting. The list of shareholders must:
 - (1) state:
 - (A) the address of each shareholder;
 - (B) the type of shares held by each shareholder;
 - (C) the number of shares held by each shareholder; and
- (D) the number of votes that each shareholder is entitled to if the number of votes is different from the number of shares stated under Paragraph (C); and

- (2) be kept on file at the registered office or principal executive office of the corporation for at least 10 days before the date of the meeting.
- (a-1) Instead of being kept on file, the list required by Subsection (a) may be kept on a reasonably accessible electronic network if the information required to gain access to the list is provided with notice of the meeting. Section 21.353(c), Section 21.354(a-1), and this subsection may not be construed to require a corporation to include any electronic contact information of a shareholder on the list. A corporation that elects to make the list available on an electronic network must take reasonable measures to ensure the information is available only to shareholders of the corporation.
- (b) The original share transfer records of the corporation are prima facie evidence of the shareholders of the corporation entitled to vote at the meeting.
- (c) Failure to comply with this section does not affect the validity of any action taken at a meeting of the shareholders of the corporation.

* * *

§ 21.411. Notice of Meeting

- (a) Regular meetings of the board of directors of a corporation may be held with or without notice as prescribed by the corporation's bylaws.
- (b) Special meetings of the board of directors shall be held with notice as prescribed by the bylaws.
- (c) A notice of a board meeting is not required to specify the business to be transacted at the meeting or the purpose of the meeting, unless required by the bylaws.
- (d) Notice of the date, time, place, or purpose of a regular or special meeting of the board of directors may be provided to a director by electronic transmission on consent of the director. The director may specify the form of electronic transmission to be used to communicate notice.
- (e) Notice is considered provided under Subsection (d) when the notice is:
 - (1) transmitted to a facsimile number provided by the director for the purpose of receiving notice;
 - (2) transmitted to an electronic mail address provided by the director for the purpose of receiving notice;
- (3) posted on an electronic network and a message is sent to the director at the address provided by the director for the purpose of alerting the director of a posting; or
 - (4) communicated to the director by any other form of electronic transmission consented to by the director.
- (f) A director may revoke the director's consent to receive notice by electronic transmission by providing written notice to the corporation. The director's consent is considered revoked for purposes of Subsection (d) if the corporation is unable to deliver by electronic transmission two consecutive notices, and the secretary, assistant secretary, or transfer agent of the corporation, or another person responsible for delivering notice on behalf of the corporation, knows that delivery of those two electronic transmissions was unsuccessful. Inadvertent failure to treat the unsuccessful transmissions as a revocation of the director's consent does not affect the validity of a meeting or other action.

* * *

Exhibit D

Selected Provisions of Delaware General Corporation Act

§ 141. Board of directors; powers; number, qualifications, terms and quorum; committees; classes of directors; nonstock corporations; reliance upon books; action without meeting; removal

* * *

(f) Unless otherwise restricted by the certificate of incorporation or bylaws, any action required or permitted to be taken at any meeting of the board of directors or of any committee thereof may be taken without a meeting if all members of the board or committee, as the case may be, consent thereto in writing, or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the board, or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

* * *

§ 211. Meetings of stockholders.

* * *

(e) All elections of directors shall be by written ballot unless otherwise provided in the certificate of incorporation; if authorized by the board of directors, such requirement of a written ballot shall be satisfied by a ballot submitted by electronic transmission, provided that any such electronic transmission must either set forth or be submitted with information from which it can be determined that the electronic transmission was authorized by the stockholder or proxy holder.

§ 212. Voting rights of stockholders; proxies; limitations.

* * *

(c) (2) A stockholder may authorize another person or persons to act for such stockholder as proxy by transmitting or authorizing the transmission of a telegram, cablegram, or other means of electronic transmission to the person who will be the holder of the proxy or to a proxy solicitation firm, proxy support service organization or like agent duly authorized by the person who will be the holder of the proxy to receive such transmission, provided that any such telegram, cablegram or other means of electronic transmission must either set forth or be submitted with information from which it can be determined that the telegram, cablegram or other electronic transmission was authorized by the stockholder. If it is determined that such telegrams, cablegrams or other electronic transmissions are valid, the inspectors or, if there are no inspectors, such other persons making that determination shall specify the information upon which they relied.

* * *

§ 219. List of stockholders entitled to vote; penalty for refusal to produce; stock ledger.

(a) The officer who has charge of the stock ledger of a corporation shall prepare and make, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting; provided, however, if the record date for determining the stockholders entitled to vote is less than 10 days before the meeting date, the list shall reflect the stockholders entitled to vote as of the tenth day before the meeting date, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Nothing contained in this section shall require the corporation to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder for

any purpose germane to the meeting for a period of at least 10 days prior to the meeting: (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. If the meeting is to be held at a place, then a list of stockholders entitled to vote at the meeting shall be produced and kept at the time and place of the meeting during the whole time thereof and may be examined by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then such list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

* * *

§ 228. Consent of stockholders or members in lieu of meeting.

* * *

(d) (1) A telegram, cablegram or other electronic transmission consenting to an action to be taken and transmitted by a stockholder, member or proxyholder, or by a person or persons authorized to act for a stockholder, member or proxyholder, shall be deemed to be written, signed and dated for the purposes of this section, provided that any such telegram, cablegram or other electronic transmission sets forth or is delivered with information from which the corporation can determine (A) that the telegram, cablegram or other electronic transmission was transmitted by the stockholder, member or proxyholder or by a person or persons authorized to act for the stockholder, member or proxyholder and (B) the date on which such stockholder, member or proxyholder or authorized person or persons transmitted such telegram, cablegram or electronic transmission. The date on which such telegram, cablegram or electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by telegram, cablegram or other electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form shall be delivered to the corporation by delivery to its registered office in this State, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders or members are recorded. Delivery made to a corporation's registered office shall be made by hand or by certified or registered mail, return receipt requested. Notwithstanding the foregoing limitations on delivery, consents given by telegram, cablegram or other electronic transmission, may be otherwise delivered to the principal place of business of the corporation or to an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders or members are recorded if, to the extent and in the manner provided by resolution of the board of directors or governing body of the corporation.

* * *

§ 229. Waiver of notice.

Whenever notice is required to be given under any provision of this chapter or the certificate of incorporation or bylaws, a written waiver, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, directors or members of a committee of directors need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the certificate of incorporation or the bylaws.

* * *

§ 232. Notice by electronic transmission.

- (a) Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the corporation under any provision of this chapter, the certificate of incorporation, or the bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given. Any such consent shall be revocable by the stockholder by written notice to the corporation. Any such consent shall be deemed revoked if (1) the corporation is unable to deliver by electronic transmission 2 consecutive notices given by the corporation in accordance with such consent and (2) such inability becomes known to the secretary or an assistant secretary of the corporation or to the transfer agent, or other person responsible for the giving of notice; provided, however, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action.
- (b) Notice given pursuant to subsection (a) of this section shall be deemed given: (1) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice; (2) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice; (3) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting, upon the later of (A) such posting and (B) the giving of such separate notice; and (4) if by any other form of electronic transmission, when directed to the stockholder. An affidavit of the secretary or an assistant secretary or of the transfer agent or other agent of the corporation that the notice has been given by a form of electronic transmission shall, in the absence of fraud, be prima facie evidence of the facts stated therein.
- (c) For purposes of this chapter, "electronic transmission" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.
 - (d) [Repealed.]
 - (e) This section shall not apply to 164, 296, 311, 312, or 324 of this title.

* * *