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Electronic Records and Signatures under the Federal E-SIGN Legislation and the UETA

By Robert A. Wittie and Jane K. Winn*

Federal legislation establishing legal parity between electronic records and signatures and their paper and ink counterparts was signed into law June 30, 2000, and became effective, at least for most purposes, on October 1. The Electronic Signatures in Global and National Commerce Act (E-SIGN or the Act)1 effectively sweeps away a myriad of anachronistic and inconsistent state and federal requirements for paper and ink documents and signatures. In so doing, E-SIGN eliminates many of the legal uncertainties that have surrounded the use of electronic media in commerce and should enable businesses and consumers alike to more fully realize the cost savings possible through all-electronic transactions.

If E-SIGN eliminates old uncertainties, however, it also creates new ones. These arise principally with respect to interpreting and applying: (i) E-SIGN’s unusual preemption provisions, which allow qualifying state laws to “modify, limit or supersede” the principal provisions of E-SIGN;2 (ii) E-SIGN’s extensive consumer consent provisions;3 and (iii) E-SIGN’s provisions allowing federal and state regulatory agencies to “interpret” the Act, particularly in the context of the regulators’ own existing and proposed rules on the use of electronic records and signatures.4 This Article

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2. Id. § 102(a).
3. See id. § 101(c)(1).
4. Id. § 104(b).
will explore those issues as part of a discussion of E-SIGN's substantive provisions and requirements and their relationship to comparable provisions in the Uniform Electronic Transactions Act (UETA).  

BACKGROUND: THE NEED FOR CERTAINTY IN ELECTRONIC CONTRACTING AND RECORDS DELIVERY

The need for something like E-SIGN goes back nearly twenty years, to when "electronic data interchange" (EDI) contracting was first implemented by U.S. businesses on a large scale. As businesses shifted their order processing systems from humans working with telephones, telexes, paper, and faxes to automated electronic contracting systems, concerns arose as to the enforceability of contracts formed by the exchange of electronic messages. Businesses with stable trading partner relationships could sign traditional paper agreements governing the exchange of messages between themselves, although it remained unclear whether this really resolved Statute of Frauds and similar problems. More difficult problems arose, however, when prospective contracting parties were not involved in a long-term trading partner relationship. Under those circumstances, the cost of executing a traditional signed agreement offline to validate online contracting would be prohibitive. The likelihood that prospective partners would find each other online and want to form a contract online vastly increased when the Internet replaced the old "value added networks" over which EDI messages were exchanged as the primary form of data network. Electronic contracting was no longer limited to businesses and their major trading partners—now, millions of consumers around the world could enter into online transactions.

In 1994, Utah became the first state to enact an electronic contracting law specifically designed to facilitate electronic transactions between par-

5. Uniform Electronic Transactions Act (1999), available at <http://www.nccusl.org> [hereinafter UETA]. References herein to "UETA" or "official UETA" are to the final text of the Uniform Electronic Transactions Act, approved and recommended for adoption by the states by the National Conference of Commissioners on Uniform State Laws (NCCUSL) in 1999. References to "non-conforming UETA" are to any version of the Uniform Electronic Transactions Act that is adopted by a state and that contains any amendment to or variation on official UETA, other than section numbering and other non-substantive changes in format.


ties having no prior relationship. The Utah legislation was technology-specific, however, in that it focused on “digital signatures”—a term that was used to describe not a mere electronic version of a “signature” in the normal sense, but rather a specific authentication technology using asymmetric cryptography. The primary justification for laws such as Utah’s was the presumed greater security and reliability of digital signature technology compared with other forms of electronic signature justification. In the years following Utah’s enactment of its digital signature law in 1994, however, digital signature technology has not come into widespread use for Internet commerce except for electronic commerce server certificates used in “secure sockets layer” communications. In addition, there is now greater recognition that the security and reliability of digital signature technology may be undermined if it is not properly incorporated into software applications, operating systems, and network technologies.

While some states followed the Utah model, other states (as well as contemporaneous revisions to the Uniform Commercial Code (U.C.C.)) chose a media-neutral model of law reform that used the terms “record” and “authenticate” to replace traditional “writing” and “signature” requirements. Still other states enacted very narrow legislation targeted at

9. The promise of digital signature technology to provide a highly secure and reliable form of electronic signature will only be met if the manner in which individuals are issued digital signatures certificates and the manner in which individuals access their digital signatures after they have been issued are highly secure and reliable. Few, if any, companies issuing digital signature certificates to the public in the United States today rigorously scrutinize an applicant’s claim to be the person identified in the certificate. Few, if any, personal computers used by individuals in their homes or places of employment can be described as highly secure. Until these security flaws can be remedied, the ability of digital signature technology in theory to create a strong bond between a real world identity and an online signature will not be realized in practice.
10. The “digital signature certificate” used in secure sockets layer communications identifies a machine, not a person or legal entity. The certificate is used to bring up a secure communication session between a client computer, usually a personal computer running Internet browser software, and the server; it is not used to “sign” anything. See Jane K. Winn, Clash of the Titans: Regulating the Competition between Established and Emerging Electronic Payment Systems, 14 BERKELEY TECH. L.J. 675, 695 (1999), available at <http://www.smu.edu/~jwinn/clash-oftitans.htm>.
authorizing electronic communications only in very specific contexts, such as certain types of citizen-government communications.\textsuperscript{13} Many states combined these approaches or did nothing at all.\textsuperscript{14}

In the face of this bewildering array of approaches to the problem, in 1997, the National Conference of Commissioners on Uniform State Laws (NCCUSL) undertook to produce a new uniform law that would bring some order and consistency to state legislation in this area. The NCCUSL drafting committee worked on a highly expedited drafting schedule, and a completed draft of UETA was finalized and approved in July 1999.\textsuperscript{15} By the time E-SIGN was enacted in June 2000, eighteen states had enacted UETA and it was under consideration in eleven more.\textsuperscript{16}

The federal government chose to act in this area, notwithstanding the availability of UETA, largely in response to urging by the high-tech and financial services industries, who were concerned by the amount of time it was likely to take before UETA could be truly adopted nationwide and by the continued adoption of laws widely divergent from UETA, even in major commercial jurisdictions such as New York. Perhaps most importantly, these industries were concerned by the very substantial, non-uniform modifications to the official text of UETA that were being made in some states and aggressively urged in others. In 1999, California became the first state to enact UETA, but only after making very substantial amendments to the official text of UETA.\textsuperscript{17} Consumer advocates in California succeeded in excluding a large number of state laws from the scope of UETA and changed many substantive provisions in ways that made it more difficult for businesses to use electronic media in communications in transactions with consumers.\textsuperscript{18}


\textsuperscript{15} The texts of current and prior Uniform Law Commissioners’ (ULC) drafts are available on a web site maintained by the University of Pennsylvania. The Nat’l Conference of Comm’rs on Uniform State Laws, Drafts of Uniform and Model Acts Official Site (last modified Aug. 23, 2000), available at <http://www.law.upenn.edu/bll/ulc/ulc.htm>.


\textsuperscript{17} See Uniform Electronic Transactions Act, codified at Cal. Civil Code §§ 1633.1-.17 (West 2000).

\textsuperscript{18} For a discussion of the non-uniform amendments and their justifications, see Consum-
As a result, industry groups effectively brought UETA to Congress and asked that it be used as the model for federal law. While many E-SIGN provisions were based on comparable provisions in the UETA, they differ from the text of UETA in various ways. Many important provisions of UETA were not carried over to E-SIGN, and conversely, E-SIGN contains some provisions—most notably its consumer consent requirements—that are quite different than UETA. All of the differences between UETA and E-SIGN will raise significant interpretive issues as determinations must be made as to which state law provisions on electronic signatures and records are preempted by E-SIGN, and which UETA provisions “supersede” federal law.

The most important UETA provisions that were omitted from E-SIGN are those governing attribution of electronic signatures, the time when messages are deemed sent or received, mistakes in electronic contracting, admissibility of electronic records as evidence, electronic documents of title or promissory notes not secured by real property, and the manner in which paper processes will be converted to electronic processes by state governments. These omissions leave states that have not yet adopted UETA with an important incentive to do so.

**E-SIGN’s CORE PROVISIONS**

**THE BASE RULE OF LEGAL PARITY**

The base E-SIGN rule, set forth in section 101(a) of the Act, places electronic records and signatures on a legal par with their paper and ink counterparts. It provides that records and signatures relating to transactions in or affecting interstate or foreign commerce may not be denied legal effect, validity, or enforceability solely because they are in electronic form or because an electronic signature or electronic record is used in their formation. Like UETA, from which most of its definitions are taken,
E-SIGN defines the terms “electronic record” and “electronic signature” broadly and in technology-neutral terms. For purposes of the Act, nearly any electronic means of recording information may constitute an electronic record, and nearly any electronic evidence that a party has acted with the intent to sign a record may be an electronic signature. E-SIGN, again like UETA but unlike many other existing state laws, does not require the use of technologies that help verify either the identity of the signing party or the integrity of the record itself, and it does not accord preferred status to electronic records or signatures created using technologies that do so. Indeed, E-SIGN places special limitations on the ability of states and both federal and state regulatory agencies to require or prefer the use of specific technologies.

While E-SIGN overrides both state and federal writing and signature requirements, it does not change the underlying, substantive law. It spec-

22. An electronic record is defined to mean “a contract or other record created, generated, sent, communicated, received or stored by electronic means.” E-SIGN, supra note 1, § 106(4); accord UETA, supra note 5, § 2(7). A “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.” E-SIGN, supra note 1, § 106(9); accord UETA, supra note 5, § 2(13).

23. An electronic signature is defined to mean “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.” E-SIGN, supra note 1, § 106(5); accord UETA, supra note 5, § 2(8).

24. A small number of states require the use of a specific technology to make an electronic signature in order to receive legal recognition. See, e.g., Utah Code Ann. §§ 46-3-201 to 46-3-504 (1998); 5 Ill. Comp. Stat. Ann. 175/5-105 to 175/5-145 (West 2000). A substantially larger number of states passed laws that set forth standards an electronic signature must meet before receiving legal recognition in such a manner that digital signatures clearly meet the standard but that do not refer to a specific technology. These standards usually require that an authentication method be unique to the person using it, be capable of verification, be under the sole control of the person using it, and be linked to the signed record in such a manner that if the contents of the record are changed, the signature will be invalidated. See, e.g., S.B. 232, 20th Leg., 2d. Sess., codified at Alaska Stat. §§ 09.25.500 to 09.25.520 (Michie 1998); Georgia Electronic Records and Signatures Act, codified at Ga. Code Ann. §§ 10-12-1 to 10-12-5 (1999 Supp.); H.B. 708 (Ky. 1998), codified at Ky. Rev. Stat. Ann. §§ 369.010 to 369.030 (1999); Nebraska Digital Signatures Act, codified at Neb. Rev. Stat. § 86-1701 (1999).


26. See E-SIGN, supra note 1, §§ 102(a)(2)(A)(ii) and 104(b)(2)(C)(iii). See also infra notes 156-71 and accompanying text.
ifies that Title I of the Act\(^27\) does not “limit, alter, or otherwise affect any requirement . . . relating to the rights and obligations of persons” that is imposed under other law “other than a requirement that contracts or other records be written, signed, or in nonelectronic form.”\(^28\) For example, there are no changes to the content or timing of notices or disclosures that must be provided pursuant to federal or state law in connection with any transaction. To avoid doubt regarding what probably would otherwise have been regarded as a particular application of this rule, the Act also specifies that Title I does not affect the “proximity” required by other law with respect to “any warning, notice, disclosure, or other record required to be posted, displayed, or publicly affixed.”\(^29\) This provision was intended to ensure, for example, that a hazard warning can still be required to be displayed on or near an item, even if it is electronic.\(^30\)

**VOLUNTARY USE AND ACCEPTANCE**

Under E-SIGN, both the use and acceptance of electronic records and signatures is voluntary. It specifies that, subject to an exception for government agencies, Title I of the Act does not “require any person to agree to use or accept electronic records or electronic signatures.”\(^31\)

Outside the context of required consumer consents,\(^32\) E-SIGN does not affirmatively require that there be any agreement to use or accept electronic records or signatures in order for them to be valid and effective. Rather, E-SIGN’s rule is negative, providing only that parties are not required to use or accept them.\(^33\) The mere fact of use, or of behavior consistent with acceptance, by a party should be sufficient to evidence that

\(^{27}\) Title I contains all of the Act’s provisions governing the use of electronic records and signatures other than the special provisions on “transferable records,” which are contained in Title II. See id. §§ 101-107; 201; infra notes 116-20 and accompanying text. Title III of E-SIGN directs the Secretary of Commerce to promote certain, specified principles for the acceptance and use of electronic signatures on an international basis, see id. § 301, while Title IV contains a non-germane provision amending section 1405 of the Child Online Protection Act, to allow the Commission on Online Child Protection to accept, use, and dispose of gifts and bequests for the purpose of aiding or facilitating its work. See id. § 401.

\(^{28}\) Id. § 101(b). UETA reaches the same substantive result by providing that transactions subject to UETA are “also subject to other applicable substantive law.” UETA, supra note 5, § 3(d).

\(^{29}\) E-SIGN, supra note 1, § 101(f); cf. UETA, supra note 5, § 8(b)(1), which does not reference “proximity” but requires that electronic records comply with requirements under other law that records be “posted or displayed in [a certain] manner.”

\(^{30}\) E-SIGN, however, expressly excepts from its coverage any document that is “required to accompany any transportation or handling of hazardous materials, pesticides, or other toxic or dangerous materials.” E-SIGN, supra note 1, § 103(b)(3). Such documentation can still be required to be in paper form so as, for example, to be easily and readily readable by passers-by or by emergency personnel in the event of an accident.

\(^{31}\) Id. § 101(b)(2).

\(^{32}\) See id. § 101(c). See also infra notes 54-90 and accompanying text.

\(^{33}\) See id. § 101(b)(2).
party’s willingness and to make applicable E-SIGN’s base rule. This is slightly different from UETA, which provides that it applies only to transactions between parties “each of which has agreed to conduct transactions by electronic means.”34 The practical impact of this distinction, however, is likely to be small, because the agreement required under UETA may be implicit and may be “determined from the context and surrounding circumstances, including the parties’ conduct.”35 As indicated in the Official Comments to UETA, the “critical element” to finding the existence of such an agreement is “the intent of a party to conduct a transaction electronically.”36 The existence of such an intent is likely to be implicit in the same behavior that, under E-SIGN, would evidence that a person has in fact used or accepted the use of an electronic record or signature. Nevertheless, the reach of E-SIGN in this respect is slightly greater than that of UETA.

By specifying that the use and acceptance of electronic records and signatures is voluntary, E-SIGN effectively preserves the autonomy of private parties to agree to limitations on, or specific criteria for, their use. While the Act limits the government’s ability to require or give preferential treatment to specific technologies, such as digital signatures, public key infrastructures, or other commercial applications of cryptography,37 it does not limit the ability of individual parties to require their use in their own transactions.38 In this manner, E-SIGN incorporates by implication the essence of autonomy provisions that had been contained in the House and Senate bills39 that were refashioned by a joint conference

34. UETA, supra note 5, § 5(b).
35. Id.
36. Id. Comments 3 and 4 make clear that the circumstances are to be construed liberally to find the requisite intent. For example, the Comments indicate that sufficient intent may be evidenced by the fact that a party to a transaction has provided the other with a business card containing his e-mail address. Id. cmt. 4, example B.
38. This legislation is, appropriately, technology neutral. It leaves it to the parties to choose the authentication technology that meets their needs. At the same time, it is undeniable that some authentication technologies are more secure than others. Nothing in the conference report prevents or in any way discourages parties from considering issues of security when deciding which authentication technology to use for a particular application. Indeed, such considerations are wholly appropriate.
39. See H.R. 1714, 106th Cong. § 101(b)(1)(A) (1999) (“the parties to [a] contract, agreement, or record may establish procedures or requirements regarding the use and acceptance of electronic records and electronic signatures acceptable to such parties”); S. 761, 106th Cong. § 5(b) (1999) (“Parties to a transaction are permitted to determine the appropriate
report\textsuperscript{40} to become the Act, without affecting any other rules of law, such as those governing unconscionable contracts, that might limit the enforceability of parties' agreements.

Governmental agencies acting outside the context of their own contracts are excluded from the general rule of voluntary use or acceptance.\textsuperscript{41} Presumably, this exclusion was intended to reflect congressional recognition that implicit in allowing private parties to use electronic records and signatures is a limitation on the ability of governmental agencies to object to that use—in other words, governmental agencies must “accept” private parties’ use of electronic records. Nevertheless, the scope and impact of this exclusion is unclear. The exclusion applies not only to the “acceptance,” but also to the “use” of electronic records and signatures. Yet, there is no indication in the legislative history that this exclusion was intended to impose an affirmative obligation on governmental agencies to use electronic records themselves, and at least one other provision in the Act suggests that this is not the case.\textsuperscript{42}

Moreover, it is apparent that, just as for private parties, it is not feasible to require governmental agencies to fully accommodate any and every choice of electronic commerce technologies made by private parties. E-SIGN accommodates this reality by specifying that regulatory agencies may prescribe rules governing the use of electronic records for record keeping purposes,\textsuperscript{43} and by allowing agencies to establish “standards and formats” for electronic filings.\textsuperscript{44} Uncertainty is exacerbated, however, by the fact that E-SIGN does not clearly distinguish between the obligation of government agencies to accept submissions from private parties that must be filed with the government in order to be effective, and the obligation of government agencies to accept records maintained by private parties in the performance of review or audit functions.

**SUBSTANTIVE REQUIREMENTS**

E-SIGN imposes only a few affirmative requirements on the use of electronic records and signatures. The most notable of these, each of which is discussed at greater length below, are the consumer consent require-
ments that apply to the electronic delivery of required written information to consumers, the provisions governing electronic record keeping, and the provisions governing transferable records. In addition, E-SIGN imposes affirmative requirements on records used to satisfy writing requirements, on signatures used to satisfy notarization or similar verification requirements, and on compliance with pre-existing rules requiring a confirmation of receipt.

Section 101(e) of the Act specifies that, if other law requires:

a contract or other record relating to a transaction in or affecting interstate or foreign commerce to 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.

E-SIGN does not specify who is "entitled to retain" a record, and it does not create any such entitlement itself, thus leaving the matter to other law. Because the common law and the Statute of Frauds generally do not entitle anyone to retain a copy of a contract, the practical impact of section 101(e)

45. See E-SIGN, supra note 1, § 101(c). See also infra notes 54-90 and accompanying text.
46. See E-SIGN, supra note 1, § 101(d). See also infra notes 91-108 and accompanying text.
47. See E-SIGN, supra note 1, § 201. See also infra notes 116-20 and accompanying text.
48. E-SIGN, supra note 1, § 101(e). Whether or not legal effect actually will be denied depends on other law, including the common law and any applicable state or federal statutes or regulations, any of which might provide that the electronic record is the legal equivalent of a "writing." The phrase "may be denied" is in marked contrast to the phrase "shall be denied," as used in the comparable provision of S. 761, as originally passed by the Senate. S. 761, 106th Cong. § 5(c) (1999).

This rule is comparable to, but differs in important respects from, UETA sections 8(a) and (c). UETA section 8(c) provides that an electronic record is "not enforceable against the recipient" if the sender "inhibits the ability of the recipient to store or print" it. UETA, supra note 5, § 8(c). This is more limited than E-SIGN section 101(e) in two respects. First, it covers only those instances in which the sender affirmatively inhibits storage or printing by the recipient, such as by using a system designed to prevent reproduction in order to preserve copyrights irrespective of the capacity of the hardware and software used by the recipient. See id. § 8 cmt. 5. Second, UETA section 8(c) applies only to enforceability, a concept that is primarily applicable only to contracts and that is legally distinct from legal effectiveness and validity. See id.; see also RESTATEMENT (SECOND) OF CONTRACTS § 8 (1981) (distinguishing between "voidable" and "unenforceable" contracts).

UETA section 8(a) provides that the electronic delivery of information will satisfy a requirement to deliver the record in writing only if the electronic record is "capable of retention by the recipient at the time of receipt." UETA, supra note 5, § 8(a). Thus, unlike E-SIGN section 101(e), UETA section 8(a) does not provide for denying the validity, enforceability, or legal effect of an electronic record itself, but relates to the criteria for electronic delivery. See id. Also, UETA section 8(a) requires only that the record be "capable of retention," not that it be reproducible, and speaks of retention "by the recipient at the time of receipt," not merely of any party that may be "entitled to retain" the record. Id.
is likely to be limited to records that consumer protection or similar laws specifically require to be provided to a party in a form that they may retain.49 Moreover, section 101(e) does not require that the electronic records actually be retained or that the entitled party actually have the ability to retain or reproduce the record. Rather, it requires only that the form of electronic record be one that could be retained or reproduced by a person having the appropriate hardware and software.50 Thus, section 101(e) is essentially an elaboration on the definition of the term “record,” which must be “retrievable in perceivable form.”51

E-SIGN section 101(g) imposes specific requirements for electronic signatures that are used to satisfy requirements that records be notarized, acknowledged, verified, or made under oath. The section expressly allows electronic signatures to be used to satisfy such requirements, but only if the electronic signature of the notary or other authorized person is attached to or logically associated with a record of all of the information, such as a form of attestation, recitals, or identifying information about a notary, that is required to be provided under the applicable notarization or similar law.52

Finally, E-SIGN section 101(c)(2)(B) requires that if a law enacted prior to the Act “expressly requires a record to be provided or made available by a specified method that requires verification or acknowledgment of receipt,” the information may be provided electronically “only if the method used provides verification or acknowledgment of receipt.”53 While this requirement is contained within the section of the Act relating to consumer consents, it is not limited to information provided to consumers.

REQUIREMENTS FOR SPECIAL USES: CONSUMER CONSENTS, RECORDS RETENTION, FILINGS, AND TRANSFERABLE RECORDS

CONSUMER CONSENT REQUIREMENTS

General

E-SIGN requires that consumers54 affirmatively consent before electronic records can be used to provide them with information that, under

49. For example, Federal Reserve Board Regulation Z requires that truth-in-lending disclosures be “in a form that the consumer may keep.” 12 C.F.R. § 226.17(a)(1) (2000).
50. In contrast, the consumer consent provisions, discussed in the text, infra notes 51-86, require that consumers be advised of the hardware and software that they will need in order for them to access and retain records that they consent to receive.
51. E-SIGN, supra note 1, § 106(9).
52. See id. § 101(g); accord UETA, supra note 5, § 11.
53. Id. § 101(c)(2)(B). It is not clear whether this reference is to June 30, 2000, which was the enactment date of the Act, or to October 1, 2000, which is the effective date for most of the Act’s provisions. The conservative view would be the October 1 effective date, since that would give broader effect to the requirement.
54. E-SIGN defines “consumer” as an “individual who obtains, through a transaction,
other law, must be provided or made available to them in writing. The Act specifies that, if the required consent is obtained following the provision of the disclosure mandated under the Act, the use of an electronic record to provide or make available the required written information "satisfies the requirement that such information be in writing."55 Nothing in the consent or other provisions of Title I of the Act, however, affects the "content or timing" of any of the information that is required to be provided.56

Even in the context of consumer transactions, the consumer consent provisions apply in limited circumstances. They apply only to electronic records that are provided or made available to consumers, not to electronic records that are obtained from them. No consent is required with respect to an electronic record of a contract, application, or related form that is electronically signed and submitted to a vendor by a consumer, except of course to the extent that the validity of that record depends upon the consumer receiving written information that the vendor provides electronically.

Moreover, the consumer's consent is required only with respect to electronic records that are used to satisfy a legal requirement that information be provided or made available to a consumer in writing. No consent is required before providing consumers with electronic information that is not required to be provided to them or that is not required to be provided in writing. For example, at least in non-regulated contexts, sales literature and contracts normally can be provided to consumers electronically without obtaining any E-SIGN consent because no law requires that they be provided, either in writing or at all. Even sales literature provided in connection with an offering under the federal securities laws could be provided to a consumer electronically without an E-SIGN consent, since again, no law requires that sales literature be provided in writing. To the extent that the securities laws require that such sales literature be accompanied or preceded by a written prospectus,57 however, E-SIGN normally would require the consumer's consent to the electronic provision of that prospectus.

products or services which are used primarily for personal, family, or household purposes."

Id. § 106(1).

55. Id. § 101(c)(1); cf. UETA, supra note 5, § 8(a) (providing that a legal requirement to "provide, send, or deliver information in writing to another person...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").

56. E-SIGN, supra note 1, § 101(c)(2)(A).

57. See 15 U.S.C. § 77b(a)(10) (1994) (providing, effectively, that a registrant's sales literature will not constitute a "prospectus" if it is accompanied or preceded by a written, statutory prospectus). Note, however, that other provisions in the Securities Act, as well as the SEC's existing interpretive guidelines allowing electronic prospectus delivery, may mean that the required prospectus need not be provided "in writing" for purposes of E-SIGN. See infra notes 207-21 and accompanying text.
E-SIGN permits federal regulatory agencies to exempt specific categories or types of records from the consent requirements, and it directs the Securities and Exchange Commission (SEC) to use that exemptive authority to allow registered investment companies to provide a statutory prospectus to consumers in connection with the provision of fund sales literature without having to obtain the E-SIGN consent. The SEC was required to issue a regulation or order exempting such prospectuses within thirty days from enactment of the Act, i.e., by July 30, 2000, and it did so, adopting on an interim final basis, new Securities Act Rule 160. This rule, which like E-SIGN, became effective on October 1, 2000, allows funds to continue to use hyperlinks and similar techniques, as currently permitted under the SEC’s electronic delivery guidelines, to ensure that sales literature appearing on their web sites is accompanied by or preceded by the fund’s prospectus without insisting that potential investors first consent to the electronic delivery of the prospectus.

The E-SIGN consent requirements do not apply to the electronic provision of records pursuant to consents obtained prior to October 1, as long as those prior consents were permitted by existing laws or regulations. Thus, providers may continue to rely on any consents that they obtain prior to October 1 pursuant to the electronic delivery guidelines already established by the SEC or other agencies regulating their activities, but only with respect to the items that are covered by those consents.

**Electronic Consent; Reasonable Demonstration of Consumer’s Ability to Access**

E-SIGN does not require that a consumer’s consent be provided in any particular form, at least in the first instance. If the consumer’s consent is not electronic, however, it must be confirmed electronically, and either an electronic consent or an electronic confirmation of the consent must be given “in a manner that reasonably demonstrates that the consumer can access information in the electronic form” in which the records covered by the consent will be provided.

The Act does not elaborate on what would be sufficient to “reasonably demonstrate” such access, although a literal reading of the statutory language suggests that the demonstration must be effected by the consent or confirmation itself. For example, a consent in the form of checking an “I consent” box in a Word 2000 document that was sent to the consumer as

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58. See E-SIGN, supra note 1, § 104(d)(1).
59. See id. § 104(d)(2).
61. See E-SIGN, supra note 1, § 101(c)(4).
62. See id. § 101(c)(1)(C)(ii).
part of the request for consent presumably would reasonably evidence the consumer's ability to access electronic records that are in the form of Word 2000 documents. Obtaining such self-validating consents, however, may be impractical. For example, a document might be provided to a consumer by means of a download from a web site in a "read-only" format, such as the Adobe Portable Document Format (PDF). The consumer would not be able to confirm access to such a document by checking an "I consent" box and returning the PDF document over the Internet. Moreover, when consent is sought for the use of several electronic formats to provide a variety of records at future dates, such as may occur when a banking, brokerage, or other account relationship is being established, obtaining a self-validating consent for each format would likely necessitate multiple consents—a result that neither businesses nor consumers are likely to want.

Legislative history, however, indicates that this provision of E-SIGN should be understood to impose only a more flexible requirement. Colloquies between key House and Senate conferees reflect their intent and understanding that the reasonable demonstration required by the Act may result from an e-mailed affirmation from the consumer that he or she has been able to access sample records in the electronic forms that would be used in the future. The "demonstration" would come from the consumer's affirmation following an opportunity to test a sample record, not from any intrinsic proof that the affirmation is accurate. The colloquies also indicate that a reasonable demonstration may result from evidence that the consumer has actually accessed the relevant type of electronic records, irrespective of whether the consumer affirms his or her ability to do so.

63. See 146 Cong. Rec. H4360 (daily ed. June 14, 2000) (colloquy between Reps. Bliley and Markey); 146 Cong. Rec. S5282 (daily ed. June 16, 2000) (colloquy between Sens. McCain and Abraham). See also 146 Cong. Rec. H4338 (daily ed. June 14, 2000) (statement of Rep. Dingell) (noting the required "one-time 'electronic check' can be as simple as an e-mail to the customer asking the customer confirm that he was able to open the attachment (if the company plans to send notices to the customer via e-mail attachments) and a reply from the customer confirming that he or she was able to open the attachment").

64. To at least one Senator, the fact that the affirmation results from a two-way communication is essential.

[The provision] means there is a two-way street. It is not sufficient for the vendor to tell the consumer what type of computer or software he or she needs. It is not sufficient for the consumer merely to tell the vendor in an e-mail that he or she can access the information in the specified formats. There must be meaningful two-way communication electronically between the vendor and consumer.


The Act provides that the legal effectiveness, validity, or enforceability of a contract executed by a consumer may not be denied “solely” because of a failure to obtain an electronic consent or confirmation that complies with the reasonable demonstration requirement.66 If the validity of a contract depends on the provision of a written notice, disclosure, or other information to a consumer, and if that information is provided by means of an electronic record after obtaining the consumer’s affirmative consent in accordance with all other E-SIGN requirements, the mere fact that the consent was not given or confirmed electronically or in a manner that reasonably demonstrated that the consumer could access information in the relevant electronic form will not invalidate the contract. This savings clause, however, does no more than preserve the validity of the related contract. It does not protect funds or other providers of electronic records from any potential liability (as, for example, under any applicable fair trade laws) or from regulatory sanctions that might result from failing to provide the required information “in writing,” as required by law.67

The practical value to consumers of the E-SIGN consumer consent provisions remains to be seen. As evidenced by the “reasonable demonstration” provision and the disclosure requirements described below, they place a high compliance burden on businesses. At the same time, they may frustrate, rather than empower, consumers, who will need to wade through lengthy and perhaps repetitive consent forms in order to do business electronically. Acknowledging that it is at least possible that the cost-benefit trade-off under the consent requirements may prove inappropriate, E-SIGN requires the Secretary of Commerce and the Federal Trade Commission (FTC) to evaluate the Act’s electronic consent and “reasonable demonstration” provisions over the next year. By July 1, 2001, they must report to Congress as to: (i) any benefits that those provisions provide to consumers; (ii) any burdens that those provisions impose on electronic commerce; (iii) whether the benefits outweigh the burdens; (iv) whether the absence of those provisions would increase the incidence of consumer fraud; and (v) any revisions to those provisions that they deem appropriate.68 In making their evaluation, the Secretary and the FTC are required to solicit comment from the general public and, more specifically, from consumer representatives and electronic commerce businesses.

66. E-SIGN, supra note 1, § 101(c)(3).
67. While not affecting the continued validity of the contract, “[f]ailure to obtain electronic consent or confirmation of consent would . . . prevent a company from relying on section 101(a) to validate an electronic record that was required to be provided or made available to the consumer in writing.” 146 Cong. Rec. S5220 (daily ed. June 15, 2000) (statement of Sen. Leahy).
68. E-SIGN, supra note 1, § 105(b). The Act also requires that, within the same period, the Secretary of Commerce conduct an inquiry and report to Congress as to the effectiveness of the delivery of electronic records to consumers specifically by means of electronic mail, as compared with delivery of written records by the U.S. Postal Service. See id. § 105(a).
Disclosure and Other Consent Requirements

E-SIGN requires that any consumer consent must be withdrawable and must not have been withdrawn. 69 The Act, however, specifies that a withdrawal of consent will not affect the validity of any electronic records provided while the consent was in effect. 70 Moreover, withdrawal of consent will not be effective until the provider has had a reasonable period following receipt of notice to implement the withdrawal. 71

In addition, the consumer consent must be preceded by a "clear and conspicuous" statement 72 that informs the consumer of:

- Any right that the consumer has to receive the record in non-electronic form; 73
- The consumer’s right to withdraw the consent and any conditions, consequences (which may include termination of the parties’ relationship), or fees that would result from such a withdrawal; 74
- The categories of electronic records that may be provided or made available pursuant to the consent during the course of the parties’ relationship, or if the consent covers only the particular transaction giving rise to the obligation to provide the record, a statement to that effect; 75
- The procedures the consumer must use to withdraw consent and to update the consumer’s electronic address; 76
- How, after consenting, the consumer may obtain a paper copy of any electronic record and whether a fee will be charged for providing it; 77 and

69. See id. § 101(c)(1)(A).
70. See id. § 101(c)(4).
71. See id.
72. Id. § 101(c)(1)(B). The Act does not specify what constitutes a “clear and conspicuous” statement, but analogies are readily available under other law. For example, privacy regulations adopted by the SEC and the federal banking agencies define “clear and conspicuous” to mean that “a notice is reasonably understandable and designed to call attention to the nature and significance of the information in the notice.” Privacy of Consumer Financial Information (Regulation S-P), 65 Fed. Reg. 40,334, 40,363 (2000) (to be codified at 17 C.F.R. § 248.3(c)(1)).
73. See E-SIGN, supra note 1, § 101(c)(1)(B)(i)(I). Since the consumer consent requirement applies only to information that is required by law to be provided in writing, this presumably will amount to a recitation of that legal requirement, coupled with an indication of whether the provider is willing to do business with the consumer on a non-electronic basis.
74. See id. § 101(c)(1)(B)(i)(II).
75. See id. § 101(c)(1)(B)(ii). Curiously, the Act does not specify that the records or categories of records covered by the consent must be identified if they all will relate to the particular transaction. It is not clear whether this distinction was intended.
76. See id. § 101(c)(1)(B)(iii).
77. See id. §101(c)(1)(B)(iv). By requiring a statement of “how,” rather than “whether” a consumer may obtain a paper copy of the record, the Act imposes a requirement that paper copies be available, albeit for a fee. This is not the same, however, as requiring that providers be willing to do business on a basis that will require the record to be provided in paper form.
• The hardware and software requirements for access to and retention of the electronic records.78

If, following the consumer’s consent, there is a change in the previously disclosed hardware or software requirements, and that change creates a “material risk” that the consumer will not be able to access or retain a subsequent electronic record, the provider of electronic records must:

• Provide the consumer with a statement of the new hardware and software requirements and of the consumer’s right to withdraw consent without the imposition of any fees or any new conditions or consequences;79 and
• Obtain a new electronic consent or a reconfirmation that again reasonably demonstrates that the consumer can access information in the electronic forms in which the records will be provided.80

E-SIGN section 101(c)(6) specifies that neither an oral communication nor a recording of an oral communication may constitute an electronic record for purposes of section 101(c) “except as otherwise provided under applicable law.”81 The inclusion of this prohibition seems to have been the result of an almost theological view that telephonic notices are inherently inadequate to protect consumers.82 However, while proponents of the provision seemed to assume that consumers could not preserve, refer to, and use recordings of oral communications to demonstrate what information was provided to them, it is not evident why this is so.83 Like any other in the first instance. Thus, as a condition of doing business, providers may insist on obtaining a consent that will enable them to satisfy their legal obligation to provide a “written” record to a consumer by electronic means. They must, however, be willing to subsequently provide a paper copy of the record, if so requested, at least for a fee.

78. See id. § 101(c)(1)(C)(i). E-SIGN does not specify that this statement be “clear and conspicuous.”

79. See id. § 101(c)(1)(D)(i). Note that the required disclosures contemplate that a provider may assess a fee if a consumer’s consent is withdrawn in the ordinary course but may not do so if consent is withdrawn following a change in the hardware and software requirements. While the provider may not impose any new conditions or other consequences for a withdrawal following such a change, it may, however, impose the conditions and consequences (other than fees) originally disclosed pursuant to subsection (1)(B)(ii).

80. See id. § 101(c)(1)(D)(ii). Presumably a failure of a consumer to provide the required re-consent or re-confirmation would constitute a “withdrawal” of consent for purposes of subsection (1)(D)(i), thereby allowing the provider to impose any conditions and consequences (other than fees) that were originally disclosed. Otherwise, the limitations on charging originally disclosed withdrawal fees would need to be read, illogically, as applying to any post-change withdrawal even if unrelated to, and substantially later than, the change in hardware or software.

81. Id. § 101(c)(6).

82. Thus, a key advocate of the consent provisions noted that section 101(c)(6) was “added at the request of the Democratic conferees” because “oral notice over the telephone will never be sufficient to protect consumer interests.” 146 CONG. REC. S5220 (daily ed. June 15, 2000) (statement of Sen. Leahy).

83. See id.
"record," a recording of an oral communication would qualify as an "electronic record" only if it is "retrievable in perceivable form," and the consent provisions themselves require that the consumer be advised of the requirements to both access and retain the electronic records that are provided.\textsuperscript{84} There is no apparent reason why such records, which may or may not use sounds as an input or output, would not accomplish the consumer protective purposes with which the proponents of the prohibition were concerned.\textsuperscript{85}

If the E-SIGN section 101(c)(6) prohibition on using oral communications or recordings of them for purposes of providing information covered by the consent provisions is read to cover more than simple audio recordings, it is likely to prove unduly limiting and to constitute a significant obstacle to the evolution of electronic commerce. Technologies are rapidly evolving to include the use of cell phones and voice-activated technologies as a platform for the receipt and delivery of information. While cell phone electronic commerce today relies heavily on a tiny visual display of text, in subsequent iterations it is likely to rely on a text-to-speech function that will play text to the user, as well as interactive voice response systems that receive spoken inputs from the user. Cell phones today are widely used to execute transactions in Europe and Japan,\textsuperscript{86} and the likelihood that large numbers of consumers in the United States will have access to, and will demand this technology in the near future is quite high.\textsuperscript{87}

It is not certain, however, how broadly this prohibition will be read to apply. The explanation of the legislation submitted by the chief Senate sponsor of the Act stated that the prohibition does not disqualify "oral communications that are . . . created or stored in a digital format."\textsuperscript{88} Recognizing the direction of technological evolution, the statement went on to note that the prohibition "is not intended to create an impediment to voice-based technologies, which are certain to be an important component of the emerging mobile-commerce market."\textsuperscript{89}

Regardless of the breadth accorded to the prohibition contained in section 101(c)(6), some relief from its limiting effects come from its specific exception for uses permitted under other applicable law. This exception appears to allow federal regulators to separately determine whether oral

\textsuperscript{84} Id. § 106(9). See id. § 101(c)(1)(C)(i).

\textsuperscript{85} Taken literally, E-SIGN's section 101(c)(6) prohibition would seem to preclude providing audio recordings of required "written" information to the blind. See id. § 101(c)(6). While alternatives such as Braille obviously exist, it is hard to fathom the public policy served by this.

\textsuperscript{86} See, e.g., Donovan Webster, The Watch That Is Your Lifeline to the World, N.Y. TIMES MAG., JUNE 11, 2000, at 87.


\textsuperscript{89} Id.
communications or recordings may be used to provide consumers with information required under the laws they administer,90 as well as to defer to current or future statutes which may allow such use.

USE OF ELECTRONIC RECORDS TO SATISFY RECORD RETENTION REQUIREMENTS

E-SIGN specifically provides that electronic records may be used to satisfy record retention requirements that are imposed under other law.91 Electronic records that are so retained must:

- Accurately reflect the information set forth in the record;92 and
- Remain accessible, for such period as is required under other law and in a form that allows the record to be accurately reproduced, to all persons who are entitled under other law to access the record.93

If a rule of evidence or other law requires that an “original” document must be retained or produced, an electronic record will meet that requirement if it meets these accuracy and accessibility requirements.94

Like UETA, E-SIGN has a special rule for the retention of canceled checks. It provides that if the information on the front and back of a paper check is stored in electronic form in a manner that meets the accuracy and accessibility requirements of E-SIGN, it will satisfy a canceled check

90. Recently promulgated guidelines and regulations already permit this. See, e.g., Use of Electronic Media, Securities Act Release No. 7856, 72 SEC Docket 753, [Current Binder] Fed. Sec. L. Rep. (CCH) ¶ 86,304, at 83,391-92 (Apr. 28, 2000) (examples 1 and 2) (allowing informed consent to be provided over the telephone after required information is provided through automated, telephonic instructions or in a live conversation); New Technologies in Retirement Plans, Internal Revenue Service Regulation 402(f), 26 C.F.R. § 1-402(f)-l (Q&A-6) (2000) (allowing employee benefit plan administrators to provide required distribution information by means of an automated voice response system (or by a human reading from a script in a live telephone call) in lieu of providing that information in writing). Even in its original 1995 release allowing the use of electronic media to satisfy requirements to provide information under the federal securities laws, the SEC considered “audiotapes” to be among the types of electronic media that could be used. Use of Electronic Media for Delivery Purposes, 60 SEC Docket 1091, 1092 n.9 (Oct. 6, 1995).

91. See E-SIGN, supra note 1, § 101(d).

92. See id. § 101(d)(1)(A); accord UETA, supra note 5, § 12(a)(1) (subsection (a)(1) is slightly more specific, referring to information “set forth in the record after it was first generated in its final form as an electronic record or otherwise”) Both statutes provide an exception to the requirement that copies remain accessible for transitory data created by information systems in the process of transmitting records from one location to another, as well as codes and other non-substantive data used solely “to enable the . . . record to be sent, communicated, or received.” E-SIGN, supra note 1, § 101(d)(2); accord UETA, supra note 5, § 12(b).

93. See E-SIGN, supra note 1, § 101(d)(1)(B); accord UETA, supra note 5, § 12(a)(2) (stating, merely, “remains accessible for later reference”).

94. See E-SIGN, supra note 1, § 101(d)(3); accord UETA, supra note 5, § 12(d).
retention requirement under other law. This provision was included in both E-SIGN and UETA because many state laws now contain requirements that canceled checks be retained. Such requirements are based generally on the assumption that payments will be made by check, and that financial audits can be facilitated by retaining those checks. Such requirements, however, are now often anachronistic and inhibit the modernization of the check collection system, particularly through the use of check truncation systems that permit the conversion of a paper check to an electronic form in order to speed presentment and return.

The E-SIGN and UETA provisions only apply to checks in the context of records retention, not to their use as a payment device. Articles 3 and 4 of the U.C.C., which govern the use of checks and other negotiable instruments, were excluded from the scope of both E-SIGN and UETA in part out of deference to concerns of bank regulators over the impact that the sudden recognition of electronic checks as a new payment device might have on the stability and security of U.S. payment systems. Moreover, revising the law of negotiable instruments to accommodate electronic checks would be a formidable task, more properly undertaken by NCCUSL, which has not yet chosen to take it on.

Subject to permitted regulatory restrictions, the E-SIGN records retention provisions obviate the need for parties to produce paper copies of electronic records solely to comply with record keeping requirements, and they allow parties who have kept paper records to convert them to electronic form. Moreover, information that is originally stored in one electronic form, such as on the hard drive of a computer, can be transferred to another form, such as a CD-ROM, or converted to an updated file format to preserve accessibility. So long as the information contained in the record is reflected accurately, such modifications of the contract or record itself are permitted.

95. See E-SIGN, supra note 1, § 101(d)(4); accord UETA, supra note 5, § 12(e).
97. In 2000, NCCUSL established a drafting committee to make revisions to U.C.C. Articles 3, 4, and 4A. The focus of these revisions are Article 4 provisions governing the return of dishonored checks, and in an effort to complete that task as quickly as possible, the scope of the drafting committee's work is quite limited. The scope of this drafting committee's work expressly excludes electronic checks, which would quite likely be a controversial topic whose inclusion would delay the completion of the drafting committee's other tasks. Information about the scope of the drafting committee's charge is available from the U.C.C. Payments Articles Revisions web site at <http://www.uccpayments.org>. See Letter from John L. McClaugherty Defining Scope of NCCUSL Charge to Drafting Committee, Feb. 10, 2000, available at <http://library.law.smu.edu/uccpayments/docs/mcclaugherty1.htm>; Memorandum from Professor Neil Cohen to Permanent Editorial Board of the U.C.C., Nov. 18, 1999, available at <http://library.law.smu.edu/uccpayments/docs/cohen1199.htm>.
Federal and state regulatory agencies, however, are expressly permitted to "interpret" E-SIGN's record retention provisions to "specify performance standards to assure accuracy, record integrity, and accessibility of records that are required to be retained."98 Moreover, while the Act generally precludes agencies from using their interpretive authority either to require the use of paper or other non-electronic records,99 or to require the use of specific technologies or technical specifications for electronic records or signatures,100 agencies are allowed some discretion to require paper, specific technologies, or both, in connection with their records retention requirements.

Federal and state agencies are permitted to use their interpretive authority under the Act101 to require retention of records in a "tangible printed or paper form," but only if "there is a compelling governmental interest relating to law enforcement or national security for imposing such a requirement," and if "imposing such requirement is essential to attaining such interest."102 As noted in the legislative history, these conditions to imposing paper record retention are clearly intended "to impose an extremely high barrier before a federal or state regulatory agency will revert back to requiring paper records."103 More particularly, it was generally understood during the conference process that the reference to "law enforcement" matters, especially as juxtaposed with reference to "national security" matters, was intended to refer only to criminal matters of high national interest, such as drug law enforcement, not to the enforcement of any and every law or regulation. It remains to be seen, however, how broadly agencies will be permitted to apply this authority. One indication that a broader reach may be permitted is legislative history noting that the SEC should be able to utilize this provision to continue to apply its rules requiring firms to obtain and retain manually signed paper records in connection with penny stocks and related accounts.104

Agencies also may interpret the record retention provisions of the Act to establish performance standards that require the use of specific technologies or technical specifications (but not to require the use of a partic-

98. E-SIGN, supra note 1, § 104(b)(3)(A).
99. See id. § 104(c)(1).
100. See id. § 104(b)(2)(C)(ii).
101. See id. § 104(b); infra notes 207-21 and accompanying text.
102. E-SIGN, supra note 1, § 104(b)(3)(B).
104. 146 CONG. REC. H4358 (daily ed. June 14, 2000) (statement of Rep. Dingell). Cf. Securities Exchange Act Rules 15g-2 and 15g-9, 17 C.F.R. §§ 240.15g-2, 240.15g-9 (requiring broker-dealers to obtain certain manually signed, "written" documents from penny stock customers). Note, however, while E-SIGN § 104(b)(3)(B) contemplates that an agency may require retention of a paper record, it does not provide that an agency may require parties to obtain paper records or to require that those records be manually signed in order for them to be valid, effective, or legally enforceable.
ular type of hardware or software), provided that the agency finds that the requirement "serves an important governmental objective." This "important governmental objective" test obviously is not as stringent as the standard imposed with respect to paper retention. The legislative history, however, indicates that this provision still is "intended to be an extremely high barrier" that will be used "in only a very, very few instances" after "exhaust[ing] all other avenues." Nevertheless, it is likely that some agencies that have already established performance standards for electronic record retention will be allowed to continue those standards by issuing appropriate interpretations under the Act.

In order to provide time for government agencies to prescribe electronic records retention performance standards, the effective date of E-SIGN with respect to records retention requirements is delayed beyond the October 1, 2000 date that generally applies for the rest of the Act. The effective date of the Act's provisions with respect to records retention requirements is nominally set for March 1, 2001. If, however, by March 1 a regulatory agency has initiated but has not completed a rulemaking proceeding to prescribe performance standards for a particular record retention requirement, then the Act's effective date with respect to that requirement will be June 1, 2001.

**ELECTRONIC FILINGS**

There is no provision in E-SIGN that explicitly allows parties to make electronic filings with governmental agencies in connection with their transactions, and several provisions in the Act imply different answers to the question of whether electronic filings are affirmatively permitted or whether agencies are merely encouraged to accept them. The latter is likely to be the answer that will prevail.

It is implicit in E-SIGN's base rule providing legal parity for electronic records that statutes and regulations may not deny the legal effect of filings with governmental agencies solely because they are made with an electronic record. As noted previously, however, E-SIGN provides that parties

107. See E-SIGN, supra note 1, § 107(b)(1)(A).
108. See id. § 107(b)(1)(B). E-SIGN also has a June 1, 2001 delayed effective dates for transactions involving loans guaranteed or insured by the federal government or any agency thereof or involving certain other government programs. See id. § 107(b)(2). Also, records provided to consumers in connection with Sallie Mae-insured student loans will not be covered until such time as the Secretary of Education publishes a notice required by other law or June 30, 2001, whichever is earlier. See id. § 107(b)(3).
are generally not required to use or accept electronic records or signatures.109 To the extent that governmental agencies are covered by this voluntariness standard, it follows that individual agencies would be free to determine, by regulation, that they will not accept electronic filings. Thus, there is at least a potential conflict between two key provisions of the Act insofar as they apply to electronic filings.

E-SIGN highlights, rather than resolves, this conflict. First, section 101(b)(2) of the Act expressly excludes governmental agencies from the general rule that parties are not required to agree to use or accept electronic records or signatures, except with respect to contracts to which the governmental agency is a party.110 This strongly suggests that governmental agencies are required to accept electronic records for filing and other non-contractual purposes. That implicit requirement, however, is undercut by other provisions in the Act.

E-SIGN section 104(a) allows any federal regulatory agency, federally supervised self-regulatory organization (SRO), or state regulatory agency to require that records filed with it be “in accordance with specified standards or formats.” Standing alone, this authority to establish “standards and formats” for filings can be easily reconciled with the exclusion of governmental agencies from the voluntariness rule of section 101(b)(2). It can be read to permit only the establishment (or continuance) of “standards and formats” for electronic records, not requirements for paper. Indeed, that reading would seem to be the best way to reconcile the two provisions.

Two other E-SIGN provisions, however, tilt the balance in favor of concluding that electronic filings may be precluded by regulatory “standards or formats” requirements. E-SIGN section 104(c)(2) cautions that federal regulatory agencies are not relieved of their “obligations under the Government Paperwork Elimination Act,”112 which establishes maximum time frames for the acceptance of electronic filings by federal agencies.113 It does not seem that there would be any purpose in having this provision if the Act itself mandated federal agencies to accept electronic filings at this time. In addition, E-SIGN section 104(c)(1), which expressly precludes

109. See id. § 101(b)(2).
110. See id.
111. The Act defines “state” to include “the District of Columbia and the territories and possessions of the United States,” but the definition does not expressly include cities, counties, and other subdivisions of a state. Id. § 106(12). Hence, the Act may not contain a comparable savings provision for local governmental agencies. If so, it may present difficulties for county recorders offices and similar local facilities that have not yet been able to convert their systems to accommodate electronic filings. Conversely, however, these offices also may not constitute “governmental agencies” within the meaning of E-SIGN section 101(b)(2), and thus there may be no ambiguity as to their ability to choose not to use or accept electronic records or signatures under E-SIGN’s “voluntariness” rule. See id. § 101(b)(2).
112. Id. § 104(c)(2).
agencies from using their interpretive authority to impose or reimpose requirements that records be in paper form, does not apply to the agencies' authority under section 104(a) of the Act, which establishes "standards or formats" for filings.114 Both of these provisions were specifically cited in the legislative history as establishing that in setting "standards and formats," agencies "may decide in some cases not to adopt an electronic process at all for filings if they determine (consistent with the Government Paperwork Elimination Act), after careful consideration, that this alternative is not practicable."115

**TRANSFERABLE RECORDS**

Title II of E-SIGN contains special provisions on “transferable records,” which are the electronic equivalent of negotiable instruments.116 The E-SIGN provisions are nearly identical to the transferable record provisions in UETA,117 except that they are limited to promissory notes secured by real property. The transferable record provisions require that the issuer have expressly agreed that the instruments will be treated as transferable records. Accordingly, they do not authorize the conversion of existing paper promissory notes to electronic form.

The transferable record provisions also set forth the technological and business process standards that must be met before an electronic version of a promissory note can be treated as equivalent to a paper promissory note. These require that the electronic promissory note be created, transferred, and stored under highly secure conditions that are sufficient to "reliably establish" that only one person can control what is done with the electronic promissory note at any point in time. If the electronic promissory note exists under such highly secure conditions, then control over it is the functional equivalent of possession of a paper promissory note. A party that is in control of an electronic promissory note under section 201 of E-SIGN may be a holder in due course, just as a party in possession of a paper note may be.

Very few computer systems in use today can meet the security standards set by the transferable record control requirements. Although a system that meets those standards is likely to rely on complex access controls and cryptography, it may also include business policies and procedures imple-

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114. See E-SIGN, supra note 1, §§ 104(a) and 104(c)(1).
115. 146 CONG. REC. E1071-72 (daily ed. June 21, 2000) (extension of remarks by Rep. Dingell). Other statements in the legislative history also indicate that section 104(a) should be read to allow agencies to require paper filings, although most add that “it is intended that use of such authority is rarely exercised.” 146 CONG. REC. H4354 (daily ed. June 14, 2000) (statement of Rep. Bililey); see also 146 CONG. REC. S5286 (daily ed. June 16, 2000) (statement of Sen. Abraham).
116. E-SIGN, supra note 1, § 201.
mented by humans as well. On the other hand, the use of encryption technologies such as digital signatures alone would not be sufficient to create a transferable record. Digital signatures can provide a guarantee of the authenticity of electronic signatures and the integrity of electronic records but, unless they are combined with access controls, cannot guarantee that no one but the legal owner of an electronic promissory note can make changes to it or transfer it to a third person.

Electronic promissory notes secured by real property were included in E-SIGN at the request of the mortgage industry and are intended to promote greater use of electronic commerce technologies in the secondary mortgage market. The language describing control as the equivalent of possession first appeared in the revised U.C.C. Article 9 provisions dealing with electronic chattel paper, which was added to promote greater use of electronic commerce technologies in equipment financing markets. The electronic chattel paper provisions of Article 9 were then adapted for use in section 16 of UETA.

SPECIAL PROVISIONS FOR ELECTRONIC AGENTS AND APPLICATION TO INSURANCE

E-SIGN elaborates on its base rule specifically to accommodate the use of electronic agents in contract or records formation. It provides that a contract or other record relating to an interstate or foreign transaction may not be denied legal effect solely because its formation, creation, or delivery involved one or more electronic agents, provided that the action of the electronic agent is “legally attributable” to the person to be bound. Like UETA, E-SIGN defines the term “electronic agent” to cover automated means of initiating or responding to records or actions “without review or action by an individual.” Unlike E-SIGN, however, the comparable provisions in UETA do not require an electronic agent's actions to be “legally attributable” to the person that would be bound,

120. Unlike E-SIGN, section 16 of UETA applies to any promissory note and to documents of title. See UETA, supra note 5, § 16(a)(1).
121. See E-SIGN, supra note 1, § 101(h).
122. Id. § 106(3); UETA, supra note 5, § 2(8). Note, however, that the E-SIGN definition refers to the absence of review or action by an individual “at the time of the action or response.” E-SIGN, supra note 1, § 106(3). This phrase appeared in early drafts of UETA, but was deleted to avoid an implication that a later review or action by an individual might still be required.
providing instead that a contract may be formed from the interaction of electronic agents "even if no individual was aware of ... the electronic agents' actions or the resulting terms and agreements."123 This UETA language was intended to negate "any claim" that might arise from agency or contract law "that lack of human intent, at the time of contract formation, prevents contract formation" when electronic agents are involved.124 By requiring that the actions of electronic agents be "legally attributable" to the person to be bound, E-SIGN may not reach the same result.

E-SIGN also contains two provisions addressing specific concerns of the insurance industry. First, in order to satisfy the specific reference requirement of the McCarran-Ferguson Act,125 E-SIGN expressly provides that it applies to the business of insurance.126 The other provision insulates insurance agents and brokers from liability if problems arise with electronic procedures agreed to in a contract entered into by the broker under the directions of a party, provided that the agent or broker was not negligent, was not involved in the development or establishment of the electronic procedures, and complied with the procedures.127 The inclusion of this provision for the specific benefit of insurance agents and brokers should not be read to imply that other agents or brokers would be liable in like circumstances.

SCOPE: RECORDS AND SIGNATURES RELATING TO TRANSACTIONS IN INTERSTATE AND FOREIGN COMMERCE

APPLICATION TO TRANSACTIONS

Subject to exceptions for specified laws and records,128 E-SIGN applies to electronic records and signatures "relating to" transactions in or affecting interstate or foreign commerce.129 This is substantially the same as under the UETA, which also applies to electronic records and signatures

123. UETA, supra note 5, § 14(1).
124. Id. § 14 cmt. 1.
126. See E-SIGN, supra note 1, § 101(i).
127. See id. § 101(j).
128. See id. § 103.
129. See id. §§ 101(a), (c), (d), (e), (g), and (h). The other provisions in Title I of the Act modify or are based on the rules established under those sections. The scope of Title II of E-SIGN, which governs transferable records, however, is not explicitly limited either to "transactions" or to interstate or foreign commerce. As a practical matter, however, transferable records would only be used in connection with a transaction and, since the primary usefulness of transferable records is to facilitate secondary mortgage market transactions, there are likely to be few transactions in which they are used that are not interstate in nature.
“relating to a transaction,”130 except, of course, that UETA is limited to transactions governed by the relevant state’s law, not to those in interstate or foreign commerce. E-SIGN defines the term “transaction” as:

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.131

This definition is intended to be broadly construed and covers the full range of business, consumer, and commercial conduct,132 including, but not limited to, the types of conduct specifically described within the definition, which are intended to be exemplary, not limiting.133 Thus, drafts of the definition that were circulated and discussed among congressional staff prior to the final conference report on the Act and that contained more lengthy itemizations of included conduct were rejected so as to avoid any inference that the description was a definitive listing or that omitted items were not included within the definition. Moreover, the types of conduct described are themselves intended to be broadly construed and applied. The legislative history of the Act emphasizes that the reference to “services” is not limited to any particular type of service, but rather it:

130. UETA, supra note 5, § 3(a).
131. E-SIGN, supra note 1, § 106(13).
132. The E-SIGN definition specifically refers to “consumer” conduct so as to avoid any possible confusion as to whether business or commercial transactions involving consumers are covered. The definition of “transaction” in UETA does not explicitly refer to consumer conduct, UETA, supra note 5, § 2(16), but the Official Comments make clear that the term is to be “construed broadly to include commercial and business transactions involving individuals who may qualify as ‘consumers’ under other applicable law.” Id. § 2 cmt. 12.
133. “The term ‘including’ is not one of all embracing definition, but connotes simply an illustrative application of the general principle.” Federal Land Bank of St. Paul v. Bismarck Lumber Co., 314 U.S. 95, 99 (1941); U.S. v. Gertz, 249 E2d 662, 666 (9th Cir. 1957) (“The word ‘includes’ is usually a term of enlargement, and not of limitation.”); Agrosy Ltd. v. Hennigan, 404 E2d 14, 20 (5th Cir. 1968) (“the word ‘including . . . conveys the conclusion that these are other items includable, though not specifically enumerated by the statute.”); American Federation of Television & Radio Artists v. N.L.R.B., 462 F.2d 887, 889 (D.C. Cir. 1972) (statutory statement that “the term ‘person’ includes one or more individuals . . . is a term of enlargement, not of limitation, and . . . the reference to certain entities or categories is not intended to exclude all others” (emphasis in original)); FTC v. MTK Marketing, Inc., 149 F.3d 1036, 1040 (9th Cir. 1998), cert. denied, 119 S. Ct. 1028 (1999) (“In terms of statutory construction, use of the word ‘includes’ does not connote limitation; in definitive provisions of statutes and other writing, ‘include’ is frequently, if not generally, used as a word of extension or enlargement rather than as one of limitation or enumeration.”).
covers any activity that would qualify as a financial activity, an activity incidental to a financial activity, or a complementary activity, under section 4(k) of the Bank Holding Company Act . . . [as well as] all activities relating to employee benefit plans or any other type of tax-favored plan.134

Similarly, a floor statement by one of the Act’s primary sponsors indicated that the Act covers all “records, signatures and agreements governed by the Securities Exchange Act of 1934 . . . [or] used in financial planning, income tax preparation, and investments.”135

The full breadth of the scope of the Act, however, is established by its use of the phrase “relating to.” While the definition of “transaction” refers to conduct “between two or more persons,” the definition expressly covers any action “relating to” such conduct.136 Thus, for purposes of E-SIGN, a “transaction” includes any unilateral actions taken in connection with bi-lateral commercial conduct.137 Moreover, the expansive effect of this definition is multiplied by E-SIGN’s operative provisions, which themselves specify that they apply to electronic records and signatures “relating to transactions.”138 This makes clear that E-SIGN extends beyond actual transaction documents to include all ancillary records, such as applications, filings, notices, and similar documentation. For example, forms that are completed to open a customer account with a retail business, a bank, or a brokerage firm, as well as documents needed in order for an investor to open an individual retirement account (IRA) or 401(k) plan are related to the business, savings, or investment transactions that will occur under that account or plan and are within the coverage of the Act.139

One aspect of the E-SIGN definition of “transaction” and, therefore, of the scope of the Act, that is somewhat narrower than UETA is the coverage of “govermental” matters. UETA specifically includes “gover-
mental affairs” within its definition of “transaction,” and notes in its official comments that the definition covers “interactions between people for . . . governmental purposes.” The reach of that reference could be considerable, extending the applicability of UETA’s rules beyond commerce to purely governmental matters such as voting or the judicial, legislative, and executive processes of government. E-SIGN stops short of this, omitting any reference to “governmental affairs” in its definition of “transaction.”

As noted in congressional floor statements on the Act, this language was omitted so that E-SIGN would not cover activities that are “part of a uniquely Governmental operation,” such as voting or related private conduct, including “collecting signatures to place a nomination on a ballot, . . . even though it might have some nexus with commerce (such as the signature collectors’ contract of employment).” While such an incidental “nexus” between a record and commerce undoubtedly is insufficient to bring nominating petitions within the ambit of the Act, it does not follow that the existence of a nexus between a record and government prevents the record from being covered by the Act. Rather, the sole determinant of whether a record or signature is covered by the Act is whether that record or signature bears a sufficient relationship to the conduct of business, consumer, or commercial affairs. Thus, the signature collector’s contract of employment, cited in the example above, is clearly a commercial contract covered by E-SIGN, even though the nominating petition is not.

140. Id. See also id. sections 17-19 legislative note regarding adoption of sections 17 to 19, which observes that even if a state does not adopt those sections (which relate primarily to the creation of electronic records by government agencies and to intergovernmental uses), the balance of UETA “will still apply to governmental entities when acting as a ‘person’ engaging in ‘transactions’ within its scope.”

141. UETA directly affects the judicial process in at least one respect, specifying that “evidence of a record or signature may not be excluded solely because it is in electronic form.” UETA, supra note 5, § 13. E-SIGN has no comparable provision.

142. See E-SIGN, supra note 1, § 106(13).


144. Perhaps the most immediate example of the kind of “uniquely governmental” activity that would not be covered by E-SIGN was President Clinton’s “signing” of the E-SIGN legislation by means of an electronic signature. In fact, the President manually signed the Act “the traditional way, with a felt-tip pen” and then re-signed it for ceremonial purposes, using a digital signature encoded on a smart card. Electronic Signatures Given Legal Standing, N.Y. TIMES, July 1, 2000, at C3. Thus, his electronic signature was not intended to be legally effective. And, of course, even if the Act had become effective immediately, rather than being deferred until October 1, E-SIGN could not have been invoked to validate the electronic signature used to make it law in the first place. Nevertheless, the signing of legislation undoubtedly is within the realm of purely governmental affairs not falling within the definition of “transaction” or the scope of the Act.
The example of the nominating petition signature collector helps illustrate a principle that is important to understanding E-SIGN’s scope—namely, that an activity that is governmental from the perspective of one party, may be a commercial or business activity from the perspective of the other. Thus, the congressional floor statements referenced above materially overstated the case when they went on to suggest that “most governmental transactions” are outside the Act’s coverage. While those statements indicated that the issuance of government grants and applications for government benefits are not “transactions” even though they may involve the issuance of a government check, it is evident that many such grants and applications will be business transactions for the applicant—for example, a scientist obtaining a research grant—and would be covered. Other legislative history recognized this point, including a colloquy involving the Act’s principal Senate sponsor that noted that E-SIGN covered “all activities relating to employee benefit plans, . . . including all related tax and other required filings and reports.”

**SPECIFIC EXCEPTIONS**

E-SIGN section 103 provides that section 101 of the Act, which contains all of the Act’s operative provisions (other than those relating to transferable records) on the use of electronic records and signatures, does not apply “to the extent” that a contract or record is governed by any of a list of specific laws or types of laws. The excepted laws are: laws governing adoption, divorce, or other matters of family law; most provisions of the U.C.C.; and laws governing the creation and execution of wills, codicils, etc.

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146. See id.
147. Coverage of records having a governmental nexus is clear from the fact that governmental agencies are included within the E-SIGN definition of a “person” who may engage in a transaction, see E-SIGN, supra note 1, § 106(8), and from the fact that the Act specifically addresses the use and acceptance of electronic records and signatures by governmental agencies, see id. § 101(b)(2), and government procurement, see id. § 104(b)(4), and filings with regulatory agencies, see id. § 104(a).
149. See E-SIGN, supra note 1, § 103(a); accord UETA, supra note 5, § 3(b).
150. As under UETA, certain U.C.C. provisions are not excepted. These are U.C.C. sections 1-107 and 1-206 and Articles 2 and 2A, which contain broadly applicable writing or signature requirements, including the Statute of Frauds. The remaining U.C.C. provisions, which are excluded from the Act’s coverage, have been revised in recent years with an eye toward the use of electronic records and signatures and generally retain only those writing and signature requirements that were considered necessary in order to preserve or protect third party rights or expectations.
or testamentary trusts. It should be emphasized that the only trusts affected by this exclusion are testamentary trusts—i.e., trusts that are created pursuant to the terms of a will and that do not take effect until after the death of the person creating them. Trusts, such as those established in connection with a retirement plan or an IRA, are created during the life of the plan participant and thus are not excluded.

Other than the exception for laws governing adoption, divorce, or other matters of family law, the laws excepted under E-SIGN are also excepted under the UETA.151 Unlike UETA, however, E-SIGN contains no exception for the Uniform Computer Information Transactions Act (UCITA).152 Thus, to the extent that UCITA contains a rule relating to electronic signatures or records that is inconsistent with E-SIGN, that rule would not be applied to a record relating to a transaction affecting interstate or foreign commerce.

While E-SIGN does not validate the use of electronic records or signatures to satisfy writing and signature requirements that are imposed under the excepted laws, other records used in the same transaction may be covered by the Act. Similarly, since E-SIGN only excludes records “to the extent” that they are governed by the specified laws, the use of an electronic record may be valid for purposes of a non-excluded law even if E-SIGN does not validate it for purposes of an excluded law. This is the same substantive rule as applies to exclusions under UETA.153

In addition, section 103(b) of the Act excepts certain types of records. These include court notices and pleadings, notices terminating utility services or health or life insurance benefits, default notices under mortgage loans on or leases of a primary residence, and product recall notices, as well as documents required to accompany the transport of hazardous materials.

E-SIGN provides for ongoing review of all of these exceptions. By June 30, 2003, the Commerce Department is required to report on whether the exemptions are necessary to protect consumers.154 In addition, any federal agency may, after providing an opportunity for public comment, eliminate an exception with respect to matters within its jurisdiction if the agency finds that the exception is no longer necessary for the protection of consumers and that its elimination presents no material risk of harm.155

151. See UETA, supra note 5, § 3(b).
152. See id. § 3(b)(3).
153. UETA, however, makes this point explicitly, supplementing the “to the extent” language in section 3(b) with a provision stating that UETA applies to an electronic record or signature that is “otherwise excluded from the application of [UETA] under subsection (b) to the extent it is governed by a law other than those specified in subsection (b).” Id. § 3(c).
154. See E-SIGN, supra note 1, § 103(c)(1).
155. See id. § 103(c)(2).
LIMITED PREEMPTION: THE ABILITY OF STATES TO SUPERSEDE E-SIGN RULES

GENERAL

E-SIGN section 102 gives states limited authority to “modify, limit or supersede” the provisions of section 101 of the Act with respect to state law.156 States may exercise this authority, however, only by adopting:

• the official version of UETA, without any state-specific variations and exclusive of individual state exceptions;157 or
• another law that specifies “alternative procedures or requirements for the use or acceptance”158 of electronic records or signatures, provided that those alternative procedures or requirements: (1) are “consistent” with the substantive provisions of the Act;159 and (2) neither require nor accord preferred status to the use of a specific technology or technical specification for electronic records or signatures.160

Superseding state laws may include laws adopted either before or after the enactment of E-SIGN, but superseding state laws (other than UETA) that are adopted after June 30, 2000, must make specific reference to E-SIGN.161

E-SIGN thus contains an unusual form of limited, express preemption of state law.162 Instead of providing, as is more common, that the Act preempts “inconsistent” state laws163 or simply allowing the preemption

156. See id. § 102(a).
157. See id. § 102(a)(1). The official version of the UETA contemplates that a state may insert in § 3(b)(4) a list of any existing state laws that the state wants to exclude from UETA’s coverage. Section 102(a)(1) of E-SIGN specifies that any laws that are so excepted from UETA will need to satisfy the E-SIGN requirements for other superseding state laws under E-SIGN. Id. § 102(a)(1).
158. Id. § 102(a)(2)(A).
159. See id. § 102(a)(2)(A)(i).
161. See id. § 102(a)(2)(B).
162. “Express preemption occurs where Congress has considered the issue of preemption, has included in the legislation under consideration a provision expressly addressing that issue, and has explicitly provided therein that state law is preempted.” Washington Mutual Bank, FA v. Superior Court of Los Angeles County, 89 Cal. Rep. 2d 560, 567 (Cal. Ct. App. 1999). Preemption of state law by a federal statute “may be either express or implied, and is ‘compelled whether Congress’ command is explicitly stated in the statute’s language or implicitly contained in its structure and purpose.’” Metropolitan Life Ins. Co. v. Commonwealth of Mass., 471 U.S. 724, 738 (1985) (citations omitted).
163. See, e.g., Gramm-Leach-Bliley Act, Pub. L. No. 106-102, 113 Stat. 1338, § 507(a) (1999) (to be codified at 15 U.S.C. § 6807(a)) (noting that the privacy provisions of Title V of the Gramm-Leach-Bliley Act “shall not be construed as superseding, altering, or affecting any statute, regulation, order, or interpretation in effect in any State, except to the extent that such statute, regulation, order, or interpretation is inconsistent with the provisions of this subtitle, and then only to the extent of the inconsistency.”); Real Estate Settlement Procedures
of inconsistent state laws to be an implicit result of the supremacy clause of the Constitution, E-SIGN approaches the subject from the opposite direction, setting forth the limited circumstances in which state laws will not be preempted. This is necessitated by the fact that, while E-SIGN clearly does not preempt the field, thereby precluding states from legislating in the area of electronic records and signatures, it also does not limit its preemption to those state laws that are ‘inconsistent’ with the Act. Instead, E-SIGN section 102(a)(1) explicitly does not preempt the 1999 official version of UETA (official UETA), irrespective of any inconsistency between that uniform statute and the Act, while E-SIGN section 102(a)(2) requires all other laws to comply with two standards: consistency with E-SIGN and technical neutrality.

The genesis of these highly unusual provisions was a conflict in congressional objectives. On the one hand, Congress wanted to create a uniform national law that would minimize obstacles to electronic commerce; on the other, it wanted to limit the extent to which it would preempt state law and, perhaps secondarily, to encourage state adoption of the official version of UETA. Consequently, E-SIGN allows states to “modify, limit or supersede” the primary provisions of the Act through the enactment of official UETA. Since the text of official UETA was a known quantity, Congress could be comfortable that its adoption would not undermine E-SIGN’s central purposes or rules. Moreover, if all states were to adopt the official version of UETA, there would still be a uniform, national rule that, while different from E-SIGN in various respects, would have substantially similar core provisions. Taken together, these factors made the prospect of a state superseding E-SIGN’s provisions through the official version of the UETA acceptable to Congress.

Act of 1974 (RESPA), 12 U.S.C. § 2616 (1994) (stating that RESPA “does not annul, alter or affect . . . the laws of any State with respect to settlement practices, except to the extent that those laws are inconsistent with any provision of [RESPA], and then only to the extent of the inconsistency.”); Federal Debt Collection Procedure Act, 28 U.S.C. § 3003(d) (“This chapter shall preempt State law to the extent such law is inconsistent with a provision of this chapter.”).


165. “In the absence of an express congressional command, state law is pre-empted if that law actually conflicts with federal law or if federal law so thoroughly occupies a legislative field ‘as to make reasonable the inference that Congress left no room for the States to supplement it.’” Cipollone, 505 U.S. at 516 (1992).


167. See id. (“I believe that the eventual adoption of UETA by all 50 states in a manner consistent with the version reported by NCCUSL will provide the same national uniformity which is established in the Federal legislation.”).
Congress could not know, however, whether other state laws, including variations on official UETA, would conform with E-SIGN’s requirements or result in any level of uniformity. Accordingly, the second part of the E-SIGN preemption provision, which applies to any state law other than official UETA, is expressly limited by a consistency standard that effectively precludes changes to any of E-SIGN’s rules. E-SIGN also requires that state laws be technologically neutral. A state law that mandates the use of a particular technology is not preempted, however, to the extent that it governs procurement systems set up by any state or state agency.

The effect of any superseding state law will be limited to requirements imposed under state, not federal, law. Even in a state that adopts official UETA, the ability of a party to satisfy federal writing or signature requirements with respect to a transaction in that state will be governed by E-SIGN, not by state law. Nevertheless, the ability of states to “modify, limit or supersede” E-SIGN’s provisions creates some potential for non-uniformity. Moreover, even apart from considerations of non-uniformity, the limited preemption provisions in E-SIGN section 102 give rise to significant questions of interpretation, particularly as to the interface between the provisions of UETA and E-SIGN and the meaning and application of the “consistency” and “technical neutrality” standards.

**THE CONSISTENCY STANDARD AND APPLICATIONS TO UETA**

The Paradox of Superseding Without Being “Inconsistent”

The semantics of the consistency standard in E-SIGN section 102(a)(2)(A)(i) are confusing since they present the seeming paradox of a state law that may “modify, limit or supersede” E-SIGN only if it is “consistent” with it. This apparent conflict is resolved, however, by understanding that E-SIGN does not preempt the field; it governs what it addresses, and (except with respect to official UETA) it preempts state law with respect to those matters, but no more. Thus, properly read, the consistency standard prevents any state law (other than official UETA) from either adding to or subtracting from the requirements that E-SIGN imposes. For example, a state could not provide that only certain types of electronic

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168. The Act specifies that the rules applying to such other laws also apply to laws that are excepted pursuant to UETA, supra note 5, § 3(b)(4), even though such exceptions could be viewed as part of the official version of UETA. See E-SIGN, supra note 1, § 102(a)(1).

169. See id. § 102(a)(2)(A)(ii). Again, official UETA did not pose this problem, since it is technologically neutral. The technical neutrality requirement does result in the preemption of digital signature laws, such as Utah’s and those modeled after it. States that developed legislation that neither follows UETA nor the digital signature model may now face very complex questions regarding the degree to which those laws are preempted.

170. See id. § 102(b).

171. See id. § 102(a).
records may be considered legally effective or used to satisfy a writing requirement because to do so would be inconsistent with E-SIGN’s base validity rule.¹⁷²

Similarly, a state may not adopt its own, non-conforming consumer consent requirements. E-SIGN section 101(c)(1) provides that the use of an electronic record in compliance with the conditions set forth in that subsection “satisfies the requirement” that the information contained in the record be provided to a consumer in writing. Hence, it is plain that a state law that imposed still more conditions on satisfying that requirement would be inconsistent with section 101(c)(1) and, therefore, would be preempted. For the same reason, a state law (other than official UETA) that imposed fewer or merely different conditions would also be preempted.

**Effect of Section 102(a) in States Adopting Official UETA**

With respect to matters that are governed by state law, all of the provisions of UETA will be given effect in a state that adopts UETA in its unamended, official form, irrespective of whether those provisions can be viewed as “inconsistent” with E-SIGN.¹⁷³ While UETA would not displace, with respect to state law, a provision in E-SIGN section 101 that is not modified, limited, or superseded by a provision of UETA,¹⁷⁴ virtually all the provisions within E-SIGN section 101 are taken from, or address, matters that are directly addressed by UETA¹⁷⁵ and, thus, would be superseded.

This may create numerous differences in application, due to small differences in substantively similar provisions. For example, both E-SIGN and UETA allow parties to satisfy record retention requirements using electronic records that comply with stated accuracy and accessibility require-

¹⁷² Moreover, under E-SIGN’s technical neutrality provisions, a state law could not provide for a presumption of authenticity or give other legal advantages to electronic records or signatures based on the fact that they result from use of a particular technology. This is likely to prevent special legal status being accorded, for example, to PKI or other specific types of security systems. Nothing in E-SIGN, however, prevents private parties from using or requiring that their counterparties use such technologies, based on their own views that they are useful.

¹⁷³ The fact that E-SIGN provides that a state “may” modify, limit, or supersede E-SIGN by adopting UETA does not mean that a state has the option to adopt official UETA but decide separately whether it wants some or all of the UETA provisions to supersed related provisions in E-SIGN. E-SIGN, supra note 1, § 102(a). The state’s choice lies in adopting or not adopting (or in the case of pre-existing laws, choosing whether to repeal or amend) provisions of law that by their nature “modify, limit, or supersede.” Id. A conclusion to the contrary would lead to enormous confusion.

¹⁷⁴ Unlike the version of S. 761 that was adopted by the Senate in November, E-SIGN does not provide that it “does not apply” in states that adopt UETA. See S. 761, 106th Cong. § 5(g) (1999).

¹⁷⁵ The only exception appears to be E-SIGN section § 101(j), which protects insurance agents and brokers from certain liabilities. E-SIGN, supra note 1, § 101(j).
ments. While those requirements are quite similar, they do not match. UETA, but not E-SIGN, specifies that the electronic record must accurately reflect the information “after it was first generated in its final form as an electronic record or otherwise.” Conversely, while UETA merely states that the electronic record must “[remain] accessible for later reference,” E-SIGN requires that the records remain accessible “to all persons who are entitled to access . . . for the period required by [other law] . . . in a form that is capable of being accurately reproduced for later reference . . . .” As a practical matter, these differences may not be material. Nevertheless, in a state that adopts the official version of UETA, the UETA standard will be applied with respect to state law retention requirements.

The most visible difference between UETA and E-SIGN, and the one most likely to generate controversy, is the consumer consent provisions in E-SIGN’s section 101(c). As discussed above, the Act provides that a consent conforming with its requirements must be obtained in order to satisfy the writing requirement inherent in any law requiring that information be provided or made available to consumers in writing. UETA, in contrast, provides that, if a law requires information to be provided, sent, or delivered in writing to any person (whether or not that person is a consumer), that 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.”

Both E-SIGN and UETA expressly allow parties to provide electronic records to satisfy writing requirements imposed in connection with the provision of information to consumers (and in the case of UETA, any other person). Since the UETA provision does so without requiring the type of affirmative consent and related disclosure required by E-SIGN, that provision clearly modifies or supersedes the E-SIGN provision. As a result, in states that adopt the official version of UETA, the E-SIGN consumer consent would not be required with respect to information that state law requires be provided.

176. See id. § 101(d)(1); UETA, supra note 5, § 12(a). See also supra notes 91-108 and accompanying text.
177. UETA, supra note 5, § 12(a)(1).
178. Id. § 12(a)(2).
179. E-SIGN, supra note 1, § 101(d)(1)(B).
180. UETA, supra note 5, § 8(a). UETA adds that an electronic record is not capable of retention by the recipient if the sender inhibits the ability of the recipient to print or store the electronic record. See id.
181. UETA does condition this provision on the parties to the related transaction having “agreed to conduct a transaction by electronic means.” Id. As discussed in the text, see supra notes 28-40 and accompanying text, however, that agreement need not be in any particular form and may be inferred “from the context and surrounding circumstances, including the parties’ conduct.” Id. § 5(b).
182. Conversely, section 8(a) will not supersede the E-SIGN consumer consent provisions unless the state enacts official UETA. See infra notes 193-98 and accompanying text.
This conclusion is contrary to the conclusion suggested by a statement in the legislative history to the effect that the “general” provisions of UETA, such as the requirement that parties agree to use or accept electronic records, are “not inconsistent with and do not displace the more specific” consumer consent requirements of the Act.183 That statement, however, ignores the specific provision on the electronic provision of information in UETA section 8(a). Moreover, other E-SIGN legislative history (notably a statement by another of the primary supporters of the consumer consent provisions) appears to recognize that the official version of UETA would displace the consumer consent provision and suggests, as a solution, that states may want to adopt the E-SIGN consent provision as part of a non-conforming version of UETA.184

The practical effect of even this prominent difference between E-SIGN and UETA, however, may be small. Compliance with the E-SIGN consumer consent provisions may prove both difficult and expensive, but a business that serves national markets is unlikely to find it productive to comply with it only in those states that have not enacted official UETA. Once the costs of developing the necessary systems have been expended, the incremental costs of deploying them in individual transactions are likely to be small. Conversely, the operational costs and risks of attempting to apply them only in the “right” locales—and to do so with respect to federal requirements in all jurisdictions—are likely to be high. Moreover, prospective customers may form a negative view of businesses that provide them with fewer protections in some jurisdictions than in others. The E-SIGN consumer consent provisions may influence the way courts evaluate consumer electronic contract disputes even in jurisdictions where those requirements are superseded by the more general requirements of UETA.

Applying the Consistency Standard in States Adopting Non-Conforming Versions of UETA

The effect of differences between UETA and E-SIGN will be different in states that adopt non-conforming versions of UETA, i.e., versions that contain any amendments to or variations from the official version.185 In such cases—and nearly all of the states that have adopted UETA to date fall into this category—a key question of interpretation will be whether the consistency standard should be applied to the entirety of the non-conforming version of UETA or, rather, applied only to the non-conforming provisions. Under the latter interpretation, any provision taken from

185. Presumably non-substantive changes, such as formatting, section numbering and the like, would not be enough to cause a state’s version of UETA not to be considered the “official” version for purposes of E-SIGN section 102(a)(1).
the official version of UETA would be allowed to supersede an inconsistent provision of E-SIGN. Under the former, any provision in a non-conforming version of UETA, even those that are identical with provisions in the official version, would be subject to the consistency (as well as the technical neutrality) standard.

Applying the consistency test on a provision-by-provision basis has some appeal when a state adopts nearly all of the official UETA provisions, making only small substantive changes or adding only a few, discrete provisions. Under such circumstances, allowing the official UETA provisions that are adopted by the state to supersede E-SIGN would maximize the extent to which UETA provisions would be applied and, thus, may seem consistent with an implicit congressional deference to official UETA. Further, in the view of a leading commentator, given the willingness of Congress to accept the provisions in official UETA, "it seems inappropriate to require judicial review of identical provisions [just] because a [s]tate legislature has chosen to include some non-uniform language."186

The logic of that approach is less convincing, however, when it is applied to large scale variations on the official version of UETA. At its extreme, that interpretation would allow a state to "cherry-pick" those official UETA provisions that they prefer to E-SIGN, without regard to consistency or national uniformity. Such a result would be incongruent with the purposes of the Act. More importantly, it is at odds with the literal language of E-SIGN section 102(a), which applies the consistency standard to any state law that is not "an enactment or adoption of" official UETA, rather than to any law that is not a provision not contained within official UETA. Thus, statements in the legislative history of the Act emphasize that any state seeking to be covered by E-SIGN section 102(a)(i) is required to enact or adopt UETA without amendment. Any variation or derivation [sic] from the exact UETA document reported and recommended for enactment by NCCUSL shall not qualify under subsection [(a)](1) . . . [and] may or may not be eligible [i.e., permitted] under subsection [(a)](2) . . . Thus, a State that enacted a modified version of UETA would not be preempted to the extent that the enactment or adoption . . . met the conditions imposed in subsection (a)(2).187

Accordingly, the proper reading of E-SIGN section 102(a) is that the consistency standard should be applied to the entirety of the non-conforming


187. 146 CONG. REC. H4353 (daily ed. June 14, 2000) (statement of Rep. Bliley) (emphasis added). See also 146 CONG. REC. S3285 (daily ed. June 16, 2000) (statement of Sen. Abraham) ("It is intended that any State that enacts or adopts UETA . . . to remove itself from Federal preemption pursuant to subsection (a)(1) shall be required to enact or adopt UETA as that document was reported and recommended for enactment by NCCUSL.").
version of UETA, not on a provision-by-provision basis, and that provisions of official UETA may supersede E-SIGN only if they are contained in a fully compliant version of UETA.\textsuperscript{188}

\textit{Identifying “Consistent” UETA Provisions}

Provisions from official UETA that are included in non-conforming versions of UETA, and therefore at least under the second interpretation set forth above, subject to the E-SIGN consistency standard, may be consistent with E-SIGN in either of two ways: they impose the same substantive rule as E-SIGN, or they cover a subject area that is simply not addressed by E-SIGN. An example of the first is the base validity rule, which is substantively the same under both UETA section 7 and E-SIGN section 101(a). No differing conditions or criteria are attached to this base rule under either statute, and so neither can fairly be said to be inconsistent with the other.

There are many examples of the second type of consistency between UETA’s provisions and those of E-SIGN, and those provisions should establish a strong incentive for states to adopt UETA despite the adoption of E-SIGN. UETA addresses the attribution of electronic records, an important issue when one party to a dispute has relied on an electronically signed record but the apparent signer of the record disavows it.\textsuperscript{189} UETA provides that in order for a party to be liable based on an electronically signed writing, the other party must be able to prove that the electronic signature was in fact the act of that person. This puts a substantial burden on the person who relied on the electronic signature, but is the same burden of proof that would be applied in a dispute involving a manual signature.\textsuperscript{190} UETA also provides default rules for determining when and where messages are sent and received.\textsuperscript{191} These rules will be helpful, for example, in determining when and where an offer to form a contract was accepted, which under applicable conflict of laws rules may determine which jurisdiction’s law applies to a transaction. UETA includes a rule clarifying responsibility in some cases of erroneous or altered electronic communications.\textsuperscript{192} While E-SIGN clearly provides that an electronic document may be an “original” document for evidentiary or other purposes, it does not have a general provision similar to UETA section 13 which


\textsuperscript{189.} See UETA, supra note 5, § 9.

\textsuperscript{190.} The burden of proof in signature disputes under negotiable instruments law, however, varies from the general rule of contract law. See \textsc{Jane K. Winn & Benjamin Wright}, \textit{The Law of Electronic Commerce} § 5.03[B] (4th ed. 2001 forthcoming), available at <http://www.smu.edu/~jwinn/LawEcomm4thed.htm>.

\textsuperscript{191.} See UETA, supra note 5, § 15.

\textsuperscript{192.} See id. § 10.
states that electronic records may not be denied admissibility merely because they are in electronic form.

Other matters, however, notably the requirements for using electronic records to satisfy requirements to provide written information to consumers, are treated directly in different ways under E-SIGN and UETA. If the E-SIGN consistency standard is applied to all provisions in a non-conforming version of UETA, the E-SIGN consumer consent requirements would apply in a state in which such a non-conforming version is adopted.

**The Prohibition on Circumventing E-SIGN Through UETA Section 8(b)(2)**

An important inconsistency between UETA and E-SIGN is the treatment of requirements under other law that records be sent by a specified method, such as by first class mail. UETA section 8(b)(2) qualifies the more general rule specifying that electronic records can be used to satisfy requirements to provide information in writing by adding that, if other law requires the record to be sent by a specified method, that method must be used. Thus, even an electronic record would need to be mailed, as, for example, by mailing a CD-ROM containing the electronic record. E-SIGN contains no such requirement, and it is implicit in the base validity rule, as well as in other provisions of the Act, that compliance with a mailing or similar requirement would not be required. Thus, in states that adopt a non-conforming version of UETA (or that do not adopt UETA at all), state mailing requirements would be overridden as “inconsistent.”

At least in states that adopt the official version of UETA, however, UETA section 8(b)(2) would supersede the inconsistent provisions of E-SIGN and thus would require compliance with mailing and similar re-

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193. See id. § 8(b)(2). UETA contains similar provisions with respect to posting, display, and formatting requirements, but for all practical purposes the E-SIGN rule is substantively the same. Cf., UETA, supra note 5, §§ 8(b)(1) and (3) and E-SIGN, supra note 1, §§ 101(b)(1) and 101(f). Thus, while these provisions are inconsistent, and the preemption provisions of E-SIGN at § 102(a)(2) would need to be applied accordingly, the practical significance of these inconsistencies is likely to be negligible.

194. In the context of information to be provided to consumers, E-SIGN section 101(c) makes clear that electronic records can be used to provide required information if the required consumer consent is obtained, but unlike UETA, it does not limit that ability by requiring compliance with mailing or similar requirements. Similarly, section 101(c)(2)(B) requires compliance with verification and acknowledgment requirements imposed under laws in effect on June 30, 2000, but allows for electronic verifications and acknowledgments and does not extend any such compliance requirement to subsequent laws or to laws imposing other, similar requirements, such as methods of delivery.

195. But cf. the view of Sen. Leahy, who suggests that E-SIGN “provides few answers” to the question of “[w]hat happens to State law requirements that a notice be sent by first class mail or personal delivery.” 146 CONG. REC. S5222 (daily ed. June 15, 2000) (statement of Sen. Leahy).
quirements that exist under other state law.\textsuperscript{196} E-SIGN limits the potential effect of this inconsistency by providing that a state may not “circumvent” the Act by imposing non-electronic delivery requirements under UETA section 8(b)(2).\textsuperscript{197} Thus, states may not convert this provision into a loophole that allows them to replace existing requirements for “written” records with new mailing or physical delivery requirements that would make the use of electronic records impracticable. Implicit in this provision is that states that have not adopted official UETA also may not use laws requiring a particular method of physical delivery to preclude the use of electronic delivery methods.\textsuperscript{198}

\textbf{THE TECHNICAL NEUTRALITY STANDARD}

The second standard that must be satisfied by any superseding state law is that it must be technologically neutral. E-SIGN section 102(a)(2)(A)(ii) specifies that to avoid the preemptive effect of the Act, a state law must neither “require” nor “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.”\textsuperscript{199} If this provision were limited to laws that “require” the use of

\textsuperscript{196} Since UETA could not affect requirements under federal law and since E-SIGN section 102 explicitly provides that states may supersede E-SIGN only “with respect to State law,” compliance with federal mailing and similar requirements would not be required. See E-SIGN, supra note 1, § 102.

\textsuperscript{197} See id. § 102(c).

\textsuperscript{198} Oddly, Senator Leahy has suggested that E-SIGN’s specific injunction against states using UETA section 8(b)(2) to circumvent E-SIGN has no negative implication for the validity of mailing or physical delivery requirements in states where official UETA does not supersede E-SIGN to validate at least existing laws imposing such requirements. To the contrary, he has argued:

\begin{quote}
Because our bill is silent on this question, and because repeal and preemption by implication are disfavored, a court or agency interpreting the legislation could reasonably conclude that these Federal and State delivery requirements remain in full force and effect. Indeed, this interpretation is practically compelled by the plain language of the legislative text.
\end{quote}

146 CONG. REC. S5222 (daily ed. June 15, 2000) (statement of Sen. Leahy). This argument appears at least overstated because by reason of sections 101(c)(1) and (2)(b), as well as by section 102(c), E-SIGN is by no means silent about the conditions imposed on using electronic means to provide information or about the ability of states to limit that use. Moreover, as the Senator went on to recognize, such an argument “does, however, have the potential to undermine one of our key legislative objectives—that is, the elimination of unintended and unwarranted barriers to electronic commerce.” Id. Nevertheless, Senator Leahy sought to “assure the courts and regulators” that at least he had no “plan to permit electronic delivery of information . . . even when the law specifies a particular method by which delivery must be made.” Id.

\textsuperscript{199} E-SIGN, supra note 1, § 102(a)(2)(A)(ii).
particular technologies, it could fairly be seen as merely an elaboration of the consistency standard—i.e., since E-SIGN’s base rule precludes denying legal effect to any “electronic record” or “electronic signature” (in each case, broadly defined) on the basis of its being electronic, it would be “inconsistent” for a state law to deny such legal effect unless the electronic record or signature uses a particular technology. The section 102(a)(2)(A)(ii) standard goes further, however, preempting any state law that would “accord greater legal status or effect to” such a technology.

Questions remain, however, as to how far this provision does go, particularly with respect to the use of authentication technologies—sometimes referred to as security procedures—designed to verify the identity of the sender of an electronic record or to ensure that the content of an electronic record has not been altered. The legislative history reflects that this provision was “intended to prevent a state from giving a leg up or imposing an additional burden on one technology or technical specification that is not applicable to all others . . . .”200 The same statement in the legislative history, however, is careful to point out that the provision is not intended “to prevent a state . . . from developing, establishing, using or certifying a certificate authority system.”201 Since E-SIGN section 102(a)(2)(A)(ii) specifically alludes to the use of technical specifications for authenticating electronic records, it seems clear that the distinction alluded to in this statement is not between establishing certificate authority systems and other uses, but rather between laws that mandate or prefer a particular technology and those that do not.202

Accordingly, so-called “digital signature” laws, such as the Utah Digital Signature Act,203 that assign legal significance only to the use of one particular electronic signature technology—in Utah’s case, “asymmetric cryptosystems” using public and private keys204—seemingly would not satisfy the technical neutrality standard and thus would be preempted. Laws that

201. Id.
202. One commentator has suggested that, since E-SIGN section 101 does not address giving preferential treatment to particular technologies, a law that merely “gives enhanced effect to any particular technology” is unaffected by the technology neutral standard. See Raymond T. Nimmer, Electronic Signatures in Global and National Commerce Act of 2000: Effect on State Laws (discussion draft, Aug. 11, 2000), available at <http://www.bmck.com/ecommerce/whatsnewesignatures.htm>. Based on this, Professor Nimmer argues that a statute providing that “signatures that use XYZ technology and certification procedures establish a presumption that they are the records or signatures of the person identified by the technology” would not be preempted because E-SIGN section 101 does not deal with attribution issues. Id. This argument goes too far, however, effectively reading the words “accord greater legal status or effect to” out of the Act.
204. Section 46-3-103(10) of the Utah Code Annotated defines a “digital signature” as a transformation of a message using an asymmetric cryptosystem such that a person having the initial message and the signer’s public key can accurately determine whether:
promote the use of digital signature technology, but are less “technology specific,” however, may not be preempted. The Illinois Electronic Commerce Security Act,\textsuperscript{205} for example, provides on the one hand that electronic signatures and records generally cannot be denied legal effect merely because they are in electronic form, and on the other, that highly secure forms of electronic signature will be given preferred legal status.\textsuperscript{206} To the

(a) the transformation was created using the private key that corresponds to the signer’s public key; and (b) the message has been altered since the transformation was made.


Utah Code section 46-3-103(2) provides: \textquote{Asymmetric cryptosystem means an algorithm or series of algorithms which provide a secure key pair.} \textbf{Utah Code Ann. § 46-3-103(2)} (1998). Utah Code section 46-3-401 provides:

(1) Where a rule of law requires a signature, or provides for certain consequences in the absence of a signature, that rule is satisfied by a digital signature if: (a) that digital signature is verified by reference to the public key listed in a valid certificate issued by a licensed certification authority; (b) that digital signature was affixed by the signer with the intention of signing the message; and (c) the recipient has no knowledge or notice that the signer either: (i) breached a duty as a subscriber; or (ii) does not rightfully hold the private key used to affix the digital signature.


\textsuperscript{205} H.B. 3180, 90th Leg. (Ill. 1997), codified at 5 Ill. Comp. Stat. Ann. 175/1-105 to 175/99-1 (West 1993 & 2000 Supp.). Section 5-105 provides: \textquote{“Electronic signature’ means a signature in electronic form attached to or logically associated with an electronic record.”} \textbf{Id. § 5-105}. Section 10-105(a) provides:

If, through the use of a qualified security procedure, it can be verified that an electronic record has not been altered since a specific point in time, then such electronic record shall be considered to be a secure electronic record from such specified point in time to the time of verification, if the relying party establishes that the qualified security procedure was: (1) commercially reasonable under the circumstances; (2) applied by the relying party in a trustworthy manner; and (3) reasonably and in good faith relied upon by the relying party.

\textbf{Id. § 10-105(a)}.

Section 10-110(b) provides:

A qualified security procedure . . . is a security procedure for identifying a person that is: (1) previously agreed to by the parties; or (2) certified by the Secretary of State . . . being capable of creating, in a trustworthy manner, an electronic signature that: (A) is unique to the signer within the context in which it is used; (B) can be used to objectively identify the person signing the electronic record; (C) was reliably created by such identified person, (e.g., because some aspect of the procedure involves the use of a signature device or other means or method that is under the sole control of such person), and that cannot be readily duplicated or compromised; and (D) is created, and is linked to the electronic record to which it relates, in a manner such that if the record or the signature is intentionally or unintentionally changed after signing the electronic signature is invalidated.

\textbf{Id. § 10-110(b)}.

\textsuperscript{206} The drafters of UETA rejected the idea that any presumption should be associated with the use of an electronic signature, following instead the normal rule regarding burden
extent that such statutes neither mandate nor prefer the use of “asymmetric cryptosystems,” but instead set a standard for a highly secure and reliable form of electronic signature that at least in theory could be met by various technologies, they might not be preempted by E-SIGN. Artful drafting, however, may not be sufficient—if a law is phrased in terms of performance standards that in reality can only be met by a particular technology, it seems likely that it would not be considered technically neutral for purposes of the Act.

**FEDERAL AND STATE REGULATORY AGENCY INTERPRETIVE AND EXEMPTIVE AUTHORITY**

**REGULATORY AUTHORITY TO INTERPRET E-SIGN**

E-SIGN provides that both federal and state regulatory agencies having rulemaking authority with respect to the statutes that they administer may use that authority to “interpret” section 101 of the Act with respect to those statutes. This interpretive authority allows regulatory agencies to provide compliance guidelines and otherwise flesh out the E-SIGN requirements in the context of the particular industries that they regulate and the statutes that they administer. As noted in the legislative history, “[g]iving each agency authority to apply section 101 to the laws it administers will ensure that this bill will be read flexibly, in accordance with the needs of each separate statute to which it applies.”

The permitted scope of agency interpretations, however, is constrained by the terms of the Act. Interpretations must be “consistent with” E-SIGN section 101 and more specifically, may not “add to the requirements of” that section. Legal principles that are normally applicable to a reg-of proof of signatures which requires the relying party to prove who signed a record in fact. See UETA, supra note 5, § 9. For a discussion of why presumptions may not be appropriate in the electronic signature context, see Jane K. Winn, Couriers without Luggage: Negotiable Instruments and Digital Signatures, 49 S.C. L. REV. 739 (1998), available at <http://www.smu.edu/~jwinn/ecouriers.htm>.

207. E-SIGN, supra note 1, § 104(b). Because it is limited to interpreting E-SIGN section 101, the interpretive authority does not extend to, among other things: the provisions on state preemption, contained in E-SIGN; the exceptions to the Act, contained in E-SIGN section 103; the agency interpretive authority itself, as well as the exemptive authority and related provisions in E-SIGN section 104; and the definitions in E-SIGN section 106. Similarly, it does not apply to the special provisions in Title II of the Act, relating to transferable records.


209. See E-SIGN, supra note 1, § 104(b)(2)(A).

210. Id. § 104(b)(2)(B). The explicit proscription against adding to the requirements of section 101 is notable since, as discussed in connection with the ability of states to supersede E-SIGN, the mere requirement that interpretive regulations be “consistent” with the requirements of section 101 implies that regulatory agencies not add to those requirements. The inclusion of this explicit provision appears to be a matter of emphasis, evidencing a strong Congressional intent that E-SIGN’s affirmative requirements, such as the consumer consent provisions contained in section 101(c), not become a mere floor that may be overlaid with regulatory requirements.
ulatory agency’s interpretation of a statute would impose substantially these same constraints. Nevertheless, the fact that these constraints are expressly set forth in the Act reflects a legislative intent that they be strictly applied to ensure that the legislative purposes of E-SIGN, including the objective of uniformity, are accomplished. Moreover, the Act further constrains agency discretion in “interpreting” the Act by requiring that such interpretations must be based on findings by the agency that:

- there is substantial justification for the interpretation;
- the methods selected to carry out the regulatory purpose are substantially equivalent to those imposed on paper or other non-electronic records and will not impose unreasonable costs on the acceptance and use of electronic records; and
- subject to limited exceptions in the context of an agency’s record keeping requirements and government procurement, the methods selected to carry out the regulatory purpose are technologically neutral, in that they neither require nor accord greater legal status to specific technologies or technical performance specifications.

Regulatory agencies, such as the SEC, the banking agencies, and the IRS, that have already issued or proposed interpretive guidance or regulations on the use of electronic records and signatures can be expected to utilize

211. When a court reviews an agency’s construction of the statute which it administers, it is confronted with two questions. First, always, is the question whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress. If, however, the ... the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency’s answer is based on a permissible construction of the statute.


212. The conference report is designed to prevent Federal and State regulators from undermining the broad purpose of this Act, to facilitate electronic commerce and electronic record keeping. To ensure that the purposes of this Act are upheld, Federal and State regulatory authority is strictly circumscribed. It is expected that Courts reviewing administrative actions will be rigorous in seeing that the purpose of this Act, to ensure the widest use and dissemination of electronic commerce and records are not undermined.


213. See E-SIGN, supra note 1, §§ 104(b)(3)(A) and 104(b)(4). The special exception allowing the agencies to establish technologically non-neutral performance standards for record keeping is discussed in the text accompanying supra notes 87-104.

214. See E-SIGN, supra note 1, § 104(b)(2)(C)(iii).
this interpretive authority to clarify the extent to which their rules need to be modified in light of E-SIGN and, conversely, the extent to which E-SIGN requirements can be satisfied using methodologies already permitted under those guidelines.

It may be tempting for these and other federal and state regulatory agencies to attempt to end-run the section 104 limitations with respect to E-SIGN’s consumer consent requirements, which apply only when other law requires information to be provided to a consumer “in writing,”215 by “interpreting” those requirements as inapplicable to any record that their own regulations or guidelines allow to be provided electronically. Under such an interpretation, even when the statute administered by the agency calls for the required record to be “written,” the agency rules would change the underlying law, leaving no “writing” requirement that could be affected by the E-SIGN rule.216 If that were true, agencies would be free, for example, to establish their own requirements for the consent required in connection with the use of electronic records, irrespective of whether those requirements were more stringent or more lenient than the E-SIGN consent provisions.217

Such a result, however, would be at odds with the uniformity that is one of the central purposes of E-SIGN and, more particularly, with the very explicit limitations on agency authority in section 104(b). There would be little reason for E-SIGN to have so explicitly and severely constrained agencies’ “interpretive” authority if those provisions could be made moot by “substantive” regulations that do precisely what section 104(b) enjoins. Moreover, as discussed below, E-SIGN gives federal regulatory agencies a specific, but again very limited, power to exempt records that are subject to their authority from the application of the section 101(c) consent requirements.218 To conclude that by adopting (or continuing) regulations allowing electronic records to be used in lieu of paper and ink, subject to

215. Id. § 101(c)(1).

216. A variation on this argument is that the E-SIGN consent requirements are merely a “safe-harbor,” stating one set of conditions that, if met, will satisfy requirements to provide required information in writing, without precluding other rules of law that specify other conditions that can be met to satisfy those requirements. The safe-harbor argument can be applied equally to both statutes and regulatory regimes. It, however, suffers from substantially the same difficulties that affect the regulatory interpretation argument discussed in the text, and in the case of state law provisions, it applies as well as from the limits placed on state preemption under E-SIGN section 102(a). Alternative, and presumably less demanding, legal requirements regarding either the need for or the nature of a consumer consent arguably are just as “inconsistent” with the E-SIGN consent requirements as are (presumably more stringent) requirements that would be imposed in lieu of the E-SIGN requirements.

217. Note that, under this line of reasoning, timing would seem not to matter. Thus, a regulation that is neither proposed nor adopted until well after the effective date of E-SIGN would be just as effective to cut-off the applicability of the E-SIGN consent provisions as would rules and guidelines that were in full force prior to its adoption.

218. See E-SIGN, supra note 1, § 104(d)(1). See infra notes 222-24 and accompanying text.
compliance with the particular terms or conditions imposed by the agency, will make the section 101(c) requirements inapplicable to those records is to effectively read the section 104 limitations on agency exemptive authority out of the statute.

Other, more nuanced distinctions, however, may allow some agency requirements regarding consumer consent to the provision of electronic records to differ from, but still co-exist with, the E-SIGN requirements. For example, the SEC’s interpretive guidelines on electronic delivery do not focus on whether or when an electronic record will satisfy a “writing” requirement, but rather on electronic delivery as a substitute for the delivery of paper. The guidelines begin with the premise that the securities laws are media neutral, and they proceed to define the conditions under which requirements to deliver written materials may be satisfied by electronic means. Since E-SIGN section 101(c)(1) specifies that compliance with its requirements “satisfies the requirement that such information be in writing,” the door arguably is open for agencies to apply their own, additional requirements for effecting electronic delivery. The distinction between the two types of requirements, however, is tenuous at best, and it would need to be applied cautiously to avoid subverting the purposes of the Act and, potentially, having the agency rules over-turned by the courts.

219. “The federal securities statutes do not prescribe the medium to be used for providing information . . . .” Use of Electronic Media for Delivery Purposes, 60 SEC Docket 1091, 1094 (October 6, 1995); see also Use of Electronic Media by Broker- Dealers, Transfer Agents, and Investment Advisers for Delivery of Information, 61 SEC Docket 2167 (May 9, 1996). “Because . . . none of the federal securities statutes exclusively require paper delivery of information, the Commission believes that interpretive guidance on the use of electronic media is appropriate.” Id. 60 SEC Docket at 1093.

220. “The Commission believes that delivery of information through an electronic medium generally could satisfy delivery or transmission obligations under the federal securities laws.” Id., 60 SEC Docket at 1094. “The Commission would view information distributed through electronic means as satisfying the delivery or transmission requirements of the federal securities laws if such distribution results in the delivery to the intended recipients of substantially equivalent information as these recipients would have had if the information were delivered to them in paper form.” Id. “[B]roker-dealers, transfer agents, and investment advisers may satisfy their delivery obligations by using electronic media as an alternative to paper based media.” Use of Electronic Media by Broker- Dealers, Transfer Agents, and Investment Advisers for Delivery of Information, 61 SEC Docket 2167, 2170 (May 9, 1996). See also, Use of Electronic Media, 72 SEC Docket 753 (April 28, 2000).

221. E-SIGN, supra note 1, § 101(c)(1).

222. The SEC impliedly drew this distinction when it noted, in its release adopting Securities Act Rule 160, that even though the electronic provision of mutual prospectuses accompanying supplemental sales literature would be exempt from the E-SIGN consent requirements, it would “not consider supplemental sales literature that is electronically delivered to have been preceded or accompanied by an electronic statutory prospectus unless” existing SEC electronic delivery requirements regarding “reasonably comparable access” to both the sales literature and the prospectus were satisfied. Exemption from Section 101(c)(1) of the Electronic Signatures in Global and National Commerce for Registered Investment Companies, Securities Act Release No. 7877, [Current Binder] Fed. Sec. L. Rep. (CCH) ¶ 86,316 (July 24, 2000).
FEDERAL AGENCY EXEMPTIVE AUTHORITY

E-SIGN also allows federal (but not state) regulatory agencies to “exempt without condition” any specified category or type of record from the Act’s consumer consent requirements. In order to grant such an exemption, the agency must determine that the exemption is “necessary to eliminate a substantial burden on electronic commerce” and that it will not increase the risk of harm to consumers.

The requirement that any such exemption be “without condition” is consistent with the preemptive nature of the E-SIGN consent requirements, which establish a single set of federal requirements for the use of electronic records to satisfy requirements that information be provided or made available in writing. Thus, while agencies may “interpret” the E-SIGN consent requirements, they may not condition an exemption from those consent provisions on compliance with their own, differing set of requirements. Given this limitation, however, agencies may be reluctant to use the exemptive authority.

CONCLUSION

E-SIGN should achieve its central objective, which is to provide businesses with greater certainty surrounding the validity of electronic contracts. Part of the political price paid for that outcome was the inclusion of cumbersome consumer protection provisions of uncertain benefit to consumers. Although federal agencies have the authority to repeal any of these provisions that can later be shown to confer little benefit on consumers, anyone wishing to do business electronically with consumers will be forced in the short term to absorb the costs of developing and deploying systems that conform to those requirements. In addition, the complex and ambiguous preemption rules in E-SIGN are likely to remain a source of confusion for some time for the state and federal agencies that are subject to them.

223. This distinction was not an oversight. “[T]he conferees considered and specifically rejected language that would have authorized State agencies to exempt records from the consent requirements.” 146 CONG. REC. S5222 (daily ed. June 15, 2000) (statement of Sen. Leahy).

224. See E-SIGN, supra note 1, § 104(d)(1).

225. See id. Congressional opinions differed on the subject of how limiting the required finding that an exemption is “necessary” for this purpose would be. House Commerce Committee Chairman Bliley suggested that “it is intended that [this] test . . . not be read as too limiting. There are vast numbers of instances when section 101(c) may not be appropriate or necessary and should be exempted by the appropriate regulator.” 146 CONG. REC. H4355 (daily ed. June 14, 2000) (statement of Rep. Bliley). Senator Leahy, however, took direct issue with this statement, stating that “the opposite is true. The test is, and was intended to be, demanding. The exemption must be ‘necessary,’ and not merely ‘appropriate,’ as Chairman Bliley suggested.” 146 CONG. REC. S5222 (daily ed. June 15, 2000) (statement of Sen. Leahy).