

Comments  
to the  
**FEDERAL TRADE COMMISSION**  
and  
**DEPARTMENT OF COMMERCE**  
National Telecommunications and Information Administration

Electronic Signatures in Global and National Commerce Act

E-SIGN Study – Comment P004102

**I. Introduction**

The National Consumer Law Center<sup>1</sup> submits these comments on behalf of its low income clients as well as the Consumer Federation of America,<sup>2</sup> and the U.S. Public Interest Research Group.<sup>3</sup> We submit these comments to *support the need for retaining the consumer consent provisions in E-Sign.*<sup>4</sup> We also are proposing additional protections..

The issue before the FTC and the Department of Commerce is whether the benefits to consumers from the requirement for electronic consent in E-Sign<sup>5</sup> *outweigh* the burdens of electronic consent. On behalf of the millions

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<sup>1</sup> The National Consumer Law Center is a nonprofit organization specializing in consumer issues on behalf of low-income people. We work with thousands of legal services, government and private attorneys, as well as community groups and organizations, from all states who represent low-income and elderly individuals on consumer issues. As a result of our daily contact with these advocates, we have seen examples of predatory practices against low-income people in almost every state in the union. It is from this vantage point – many years of dealing with the abusive transactions thrust upon the less sophisticated and less powerful in our communities – that we supply these comments. We publish and annually supplement twelve practice treatises which describe the law currently applicable to all types of consumer transactions. These comments are written by Margot Saunders, Managing Attorney of NCLC's Washington office.

<sup>2</sup> The Consumer Federation of America is a nonprofit association of some 250 pro-consumer groups, with a combined membership of 50 million people. CFA was founded in 1968 to advance consumers' interests through advocacy and education.

<sup>3</sup> U.S. Public Interest Research Group serves as the national lobbying office for state Public Interest Research Groups. PIRGs are non-profit, non-partisan research and advocacy groups with offices around the country.

<sup>4</sup> Federal Electronic Signatures in Global and National Commerce Act, Pub. L No. 106-229, 114 Stat. 464 (2000) (codified as 15 U.S.C. §§ 7001-7006, 7021, 7031) (enacted S. 761).

<sup>5</sup> The specific provision of E-Sign which is at issue is the requirement for consumers that before

(c)(1) . . . the use of an electronic record to provide . . . information such information satisfies the requirement that such information be in writing if –

(C) the consumer – . . .

(ii) consents electronically, or confirms his or consent electronically, in a manner that reasonably demonstrates that the consumer can access information in the electronic form that will be used to provide the information that is the subject of the consent.

of low and moderate income consumers that we represent, we can categorically state that there are substantial benefits to consumers, and minimal burdens. The electronic consent protects consumers in both the off-line world, as well as the on-line world. The provisions protect consumers from agreeing to electronic records mistakenly, or as part of a form contract. They protect consumers from mistakenly agreeing to receive electronic records in a form that they are not able to access and retain. And these provisions protect consumers from fraudulent practices which might otherwise be facilitated by the laws like E-Sign, which are designed only to expedite the transition to an electronic marketplace.

We believe that once access to the Internet is more widely available to all Americans, especially the nation's poor and elderly, there may be many new and beneficial opportunities made available. However, policies to facilitate electronic commerce must assure that consumers who are looking for credit, goods and services both through the Internet *and in the physical world* will not be victimized by overreaching merchants of goods and services.

Encouraging electronic commerce and protecting consumers need not be competing goals. The key to facilitating electronic commerce while protecting consumers' interests is to ensure that all of the assumed elements to a transaction in the physical world are in existence in electronic commerce, and that ecommerce not be the excuse for reducing consumer protections in real world transactions.

In these comments we address:

- The current and future effect of the consumer consent provisions of E-Sign.
- The need to protect consumers, and the benefits of the consumer consent provisions, with particular focus on special issues facing consumers in the new world of electronic commerce:
  - a. The necessity to protect consumers *who are conducting real world transactions* from unfair or fraudulent practices which may be facilitated by E-Sign or other laws designed to expedite e-commerce.
  - b. The importance of protecting consumers who are conducting business on line *using a public access computer*.
  - c. The risks that consumers face when relying on electronic transmission of important notices.
- Recommendations to improve protection of consumers from risks imposed by electronic exchanges.

#### **I. The Current and Future Effect of the Consumer Consent Provisions of E-sign**

The internet has considerably broadened the power of consumers to access information and to comparison shop for goods and services. In many instances, purchases made over the internet are less expensive than would be available to consumers shopping in the real world. There are clear, undeniable benefits to consumers from engaging in e-commerce. However, it should be kept in mind that consumers' confidence in their own privacy and in their financial security is also essential for an active consumer marketplace to thrive.

Indeed, laws pre-dating E-Sign provide consumer protections which have allowed e-commerce to thrive. *But for the substantial consumer protections provided by the Truth in Lending Act for credit card purchases,*

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<sup>5</sup>(...continued)

*ecommerce would not have flourished as it has*<sup>6</sup> *in the past decade.* When purchases are made over the Internet, they are generally paid for with a credit card. Payment by credit card provides a wide array of consumer protections mandated by the Truth in Lending Act,<sup>7</sup> insuring – among other things – that the consumer is not billed for items not ordered, or not received, or not as warranted. In the less typical situation of a consumer using a debit card to make a purchase; the protections against unauthorized use provided by the Electronic Fund Transfers Act<sup>8</sup> apply.

To date, we do not believe that the provisions of the consumer consent provisions of E-Sign have been used for many contractual arrangements over the net. To the extent that the consumer consent provisions of E-Sign have been implicated since its passage, it has generally been in the areas of electronic banking and provision of information relating to securities. In other words, most transactions which are required to be in writing are *still being conducted on paper* rather than electronically. Industry may say that this is because the consumer consent provisions of E-Sign are too onerous. Actually, the news reports indicate that there other, more technical problems that must be ironed out before business is conducted entirely electronically.<sup>9</sup> The passage of E-Sign, as well as the passage by many states of the Uniform Electronic Transactions Act, has *established the legal authority for electronic records and signatures.* But these laws have not provided the participants in ecommerce with necessary assurances. The big questions of 1) how to authenticate the players on-line, and 2) how to ensure that the electronic records have reasonable integrity against alteration, remain unanswered.

Before the next big step is made in ecommerce, both business and consumers must be assured that they will be reasonably protected from losses. The issue for the regulators is to ensure that the protections afforded consumers will be meaningful and enforceable. While we believe that, due to unrelated technological shortcomings, few transactions have been undertaken with the consumer consent provisions of E-sign in the few months since the statute's enactment, those protections will be highly important as a predicate for the future growth of e-commerce.

## **II. The Benefits of the Consumer Consent Provisions Far Outweigh the Minimal Burden**

**Significance of Using Electronic Records to Replace Paper.** An important complexity in the analysis of the need for the consumer electronic consent provisions of E-Sign is the fact that the law applies to situations and transactions which are entirely *non-electronic*. If this were not the case, our concerns would be considerably different. But, E-Sign does not limit its application to transactions conducted between parties who are both on-line. This means that consumers who are standing in a place of business may be asked to agree to receive important documents electronically. They may be asked to agree to receive electronic records immediately – relating to the transaction taking place in the store, or they may be asked to receive electronic records in the future – relating to an ongoing relationship between themselves and the business.

E-Sign allows an electronic record to satisfy a legal requirement for a writing. Generally when the law requires that a notice or a contract be provided in writing to a consumer there has been a recognition that the consumer needs to receive the information in the record in a form the consumer can *access* and can *keep*. State and federal requirements that certain information be given to consumers in writing have been adopted only after a

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<sup>6</sup> Compare the explosive use of electronic commerce for the purchasing of goods and in the U.S. to the paltry amount in Europe. Undeniably the difference is in the protections afforded the American consumer when they use credit cards to pay for their purchases on-line.

<sup>7</sup> 15 U.S.C. § 1601 *et seq.*; see §§ 1642, 1643, 1644, 1666.

<sup>8</sup> 15 U.S.C. § 1693 see § 1693g.

<sup>9</sup> See, e.g. Tom Fernandez, *The American Banker*, *E-Signature Law Proves Tough to Put into Practice*, March 13, 2001.

finding of a pattern of harm to consumers when that information is *not* delivered in writing. Required paper notices and documents are critically important to ensure that consumers are apprized of their rights and obligations, and have the proof of the terms of their contracts to enforce these rights in court.

E-Sign allows electronic records to replace paper. But the differences between the physical world and the electronic world must be recognized. For example, when a law requires a document to be in writing there are a number of inherent assumptions that automatically apply to that writing that are not necessarily applicable to an electronic record:

- A piece of paper handed to or mailed to a person can be read without any special equipment.

A computer is required to access or read an electronic record.

- A written record can be received by the consumer at no cost to the consumer. The consumer pays nothing to maintain and open the mailbox to which the U.S. Post delivers the mail daily.

The electronic record can only be accessed through a computer connected to a third party for whom payment is generally required on an ongoing basis – the Internet Service Provider, or ISP.

- If the consumer moves, U.S. Postal mail can be easily forwarded, at no cost to the consumer and with minimal difficulty – one notice to the Post Office suffices to forward all incoming mail for a year.

ISPs generally do not forward electronic mail. Occasionally electronic mail will bounce back as undeliverable to the sender, but this is not automatic and not universal.

- A paper writing does not require special equipment to hold on to, or to retain. A consumer need only put it in the drawer, or in a file, where it will remain until the consumer removes it.

An electronic record can only be retained electronically. The consumer must have access to a computer with a hard disc to retain the record,<sup>10</sup> or access to a computer with a printer to retain a printed copy of the electronic record (although the printed copy may not be useful to prove the terms of the electronic record in court unless the paper representation of the electronic record includes some means of verifying that it is a true reflection of the actual electronic record received by the consumer.)<sup>11</sup>

- A paper writing is by its nature tangible. Once handed to, or mailed, to a person it will stay on the table or in the drawer, wherever the consumer put it, until it is thrown out by the consumer.

An electronic record can be provided in a form which will disappear after a period of time determined by the provider of the record. For example, E-Sign contemplates that a consumer could be provided notice of important information by providing a web-link to an internet posting. If the consumer does not access the internet web-link in time, the electronic record may no longer be there.

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<sup>10</sup> It is conceivable that the consumer without regular access to a computer with a hard disc could use a floppy disc or a CD to retain important electronic records. But this requires access to a computer on which to download the records on to the floppy when they are received, and access to a computer with similar capabilities to access the electronic records at a later time when they are needed.

<sup>11</sup> Although this method of delivery may be legal under E-Sign, it is likely *not* to meet the delivery requirements of the underlying law requiring delivery of the particular notice to the consumer.

- The printed matter on the paper writing will not change every time someone looks at it, and the paper writing can be used at a later date to prove its contents in a court.

The electronic record could be provided in a format which is not retainable by the consumer. And, even if the consumer is able to access and retain the electronic record, the record may not be printable in the same format in which it was viewed. To provide the same level of integrity to an electronic record that exists naturally with a paper writing, a special effort must be made: the electronic record must be deliberately preserved in a particular *locked* format (Adobe, XML, etc.) to prevent alterations by mistake or deliberately every time the document is read.

These are a lot of differences between paper writings and electronic records. One significant difference is that it *takes money to access and retain electronic records in a useable format*. It does not take money to access and keep and use the same information in a paper format.

According to the most recent Commerce Department report:<sup>12</sup>

- The majority of Americans have no access to the Internet – over 55%.
- Only 25% can access the Internet from their home.
- Over 8% of Americans rely on public access, their employer's, or another person's computer.
- The percentages of elderly and the poor who do not have access computers are much higher.

While we want to encourage and facilitate electronic commerce, we must remember that **this is a majority of Americans still not connected to the Internet, at home, at work, or in a public place**. Only access at home can be considered a reliable method of receiving personal information. Use of a computer at work is frowned upon or considered grounds for disciplinary action by many employers. Public access computers have extensive waiting times and limitations on use.<sup>13</sup>

While e-commerce has great potential, the differences between paper documents and electronic documents, and the gap in Internet access, invite exploitation by fraudulent marketers. There are numerous scenarios which describe the dangers presented to consumers by E-Sign. Below, we set out a few to illustrate the reasons why the electronic consumer consent provision in E-Sign is so important to protect consumers:

1. **Danger – Use of electronic records as a method of avoiding providing information to consumer who lacks access to the Internet.** An elderly woman is visited at home by a home improvement salesman who talks her into taking out a home equity loan to pay for an overpriced home improvement. The salesman has the woman sign a various papers that include a statement that she agrees to receive all notices and disclosures on line. She also signs an acknowledgment that various disclosures required by state and federal law have been provided to her electronically, and indeed the salesman has posted these documents on a website or sent them to an email address he has set up for her. However, the woman has no home computer and no knowledge of how or where she can access a computer. She might even be home bound or disabled.

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<sup>12</sup> U.S. Department of Commerce, Economic and Statistics Administration & National Telecommunications and Information Administration, *"Falling Through the Net: Toward Digital Inclusion" A Report on Americans' Access to Technology Tools*, October, 2000. Figure 2-1.

<sup>13</sup> A telephone survey of public libraries in Boston, New York City, Philadelphia, Chicago, and Los Angeles by Gary Dotterman of the National Consumer Law Center on March 15, 2001, revealed that access to Internet ready computers generally required waiting times of from 30 minutes to two and half hours, depending upon the time of day, and the particular community in which the library is located. Adult users are generally limited in their usage to 30 minutes. The cost to print each page varied from 10 cents to 25 cents.

Federal and state consumer laws require that the documents relating to the transaction be provided to the woman in writing. This writing requirement is some assurance the consumer will be apprized of the following important information:

- the terms of the sales and financing contract (Retail Installment Sales Contract)
- the cost and the monthly payments for the mortgage taken out on her house (Truth in Lending Disclosures)
- the consumer's right to cancel the transaction within three days (FTC Door to Door Sales Rule).

The requirement that this important information be provided in writing also ensures that the home improvement salesman cannot alter the terms of the contract after she has signed it. The writing requirement also provides this consumer with a chance to review the documents, or get help to review them, and cancel the loan within a certain period of time.

E-Sign's requirement for consumer electronic consent provision addresses these issues, albeit imperfectly. A comparison with what can happen under the provisions of the Uniform Electronic Transactions Act (UETA)<sup>14</sup> is relevant, because UETA does not require electronic consent. Under UETA, a consumer who does not own a computer *could sign a piece of paper* in a person-to-person transaction and later find that all notices, disclosures, and records relating to that transaction are to be sent electronically to an email address set up for the consumer by the salesperson.

E-Sign does not permit paper form agreements to be used as the sole method for consumers without computer skills or equipment to agree to electronic disclosures or notices. E-Sign prohibits this by requiring that the consumer's consent must be either given or confirmed electronically. Mere paper consent to receive future electronic notices is not sufficient to permit an electronic notice to replace a legally required paper notice.<sup>15</sup>

In the absence of the consumer electronic consent provision of E-Sign, crucial notices which now are required to be physically handed to these consumers to be emailed instead. UETA permits this dangerous scenario to occur.

**2. Danger – Using Product Price *Unfairly To Persuade Consumer to Accept Electronic Records Instead of Paper.*** A consumer walks into a car dealership to buy a car. The salesman says the price for the car is \$10,000, so long as the consumer agrees to accept all records relating to the transaction electronically. The consumer points out he does not have a computer at home or work, and he certainly does not have an email address. The salesman assures the consumer that he can establish a “hotmail” account for the consumer at no cost, and he can access his documents at any public library. He says that as the dealership printer is broken, if the consumer insists on paper, the car will be \$5,000 more, making the monthly payments \$150 a month higher. The high pressure sales tactics work, and the consumer *electronically* signs the contract and financing agreement as UETA would allow. The consumer drives away in his new car without a copy of the signed contract.

There could be two detrimental consequences from this scenario. The first is simply burdensome on the consumer. The second facilitates fraud.

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<sup>14</sup> By the end of this season, it is likely that a majority of states will have passed some form of UETA. The issue of whether the consumer consent provisions of E-Sign apply in those states is a very complicated one, which will not be finally resolved for some time. See, Gail Hillebrand and Margot Saunders, *E-Sign and UETA: What Should States Do Now?* (October, 2000), <http://www.consumerlaw.org>.

<sup>15</sup> E-Sign also has a provision which explicitly states that it does not require anyone to use electronic records. E-Sign § 15 U.S.C. § 7001(b).

*Should it be burdensome to a consumer to access records legally required to be provided?* At the least, the consumer will have the significant burden of finding a public access computer with the type of programs necessary to access the internet, access his email account, and open the electronically provided documents sent by the car dealer. The public access computer must also have a working printer. The consumer will then have the burden of figuring out how to access his new email account, opening the documents, and printing them. This is considerably easier to articulate than it is to do. In many public libraries in populous areas, there is often a long wait to use computers with Internet access, and an even longer wait for computers attached to a working printer. This required sequence of efforts is so burdensome that it is likely that many consumers simply will not procure the electronic copy of their paperwork. If and when there is a dispute with the car dealer, or the finance company, – months or years later – then the consumer will try to get a copy of the records. But if the consumer never uses the “hotmail” account, it is likely it will have expired, and the records will no longer be accessible.

Some may ask what is the incentive of the car dealer in this scenario to avoid providing paper to the consumer. The answer is that the laws which require writings to be provided to the consumer generally set out civil penalties for failing to comply with the substantive consumer protections or failing to disclose properly information relating to the transaction. Consumers who do not have the records of these writings cannot file suit in court claiming that the dealer has violated these consumer protection laws.

*Should laws facilitating electronic commerce also expedite fraud?* The more serious consequence to the consumer is the extent to which the potential for electronic provision of documents eases – even encourages fraud while leaving a consumer without any reasonable means to prove it. In the car dealer scenario described above, when the consumer “signs” the documents electronically at the computer on the car dealer’s desk, the consumer has not necessarily “locked” the document. In a paper transaction, the consumer would pen his name to a piece of paper, either several times, or once with carbon copies being automatically created. The dealer then signs, tears off the consumer’s copy and hands the consumer his copy. The consumer takes that copy away with him when he drives off. But when the consumer electronically signs the contract *at the dealership*, and then the records are sent to his email address by the dealer, the dealer has the opportunity to *change* the electronic record, after the signature was affixed. (There is nothing in E-Sign which requires that the process of electronically signing a record would prevent alteration of that record.)

After the consumer leaves, the salesman could easily change the terms of the electronic contract, for example, by increasing the interest rate or not giving the consumer credit for the trade-in. If the consumer later objects, he has absolutely no basis on which to contest the electronic contract, because the electronic record was not locked when he signed, and he walked away with no paper copies of the agreement that he agreed to. Even if the documents are not altered, providing them electronically makes it much easier to slip onerous terms past the consumer, who may not see the entire document on the screen at the dealership and will not have a paper copy to review.

E-Sign’s consumer electronic consent provisions would prevent both of these scenarios from taking place. E-Sign effectively prohibits this (although this prohibition could be more specific) by requiring electronic consent “in a manner which reasonably demonstrates that the consumer can access information in an electronic form. A consumer who is in a face-to-face transaction should not be able to consent electronically by using the computer equipment belonging to the seller. That consent does not meet E-Sign’s requirements that the electronic consent demonstrates “that the consumer can access information in the electronic form.” As Senator McCain said, “[t]his should mean that the consumer must initiate or respond to an email to consent or confirm consent.”<sup>16</sup> Congressional

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<sup>16</sup> 146 Cong. Rec. S5219-5222 (daily ed. June 15, 2000) (statement of Sen. McCain).

statements by the sponsors of this legislation indicate that the only rational reading of E-Sign's strict requirements for consent would prohibit this activity.<sup>17</sup>

3. **Danger – Inability of the Consumer to Access or Retain Important Electronic Records.** Under UETA a consumer could agree to receive important documents electronically *mistakenly* believing that the computer the consumer intends to use has a certain program or a certain capacity, only to discover *after* the agreement is made that the consumer is not able to open, read or retain the records. Is there any individual who is not a computer expert who has not received emails with attachments that could not be opened? What if the consumer had agreed to receive his monthly credit card bills in a Word Perfect format, only to discover when the first bill came that his computer could not open these records. When the consumer contacts the provider, he is told that this is the only format that is available, and that if the consumer can't read the statements at home, he will simply have to go to a public access computer each month. This provider may require the use of electronic records, so that the card would be cancelled, and all payments immediately due if the consumer refused to accept electronic records.<sup>18</sup>

E-Sign's requirement for electronic consent "in a manner that reasonably demonstrates that the consumer can access information in the electronic form that will be used to provide the information" unequivocally protects against this danger. To assure that the consumer actually has access to the necessary hardware and software to access these documents, the consumer consent process should test and assure capacity to receive electronic notices. E-Sign's electronic consent requirement addresses this issue by requiring that the initial consent both be electronic and that it "reasonably demonstrate" the ability to receive notices using the consumer's existing technology. *Until there is a universal electronic language that every computer can read this protection is necessary.*

**Summary.** Allowing electronic contracts, disclosures, and notices creates new opportunities for fraud and overreaching. The consumer consent provisions of E-sign will reduce this potential. Rather than placing a significant burden on e-commerce, the consumer consent provisions will aid e-commerce by deterring fraud and abuse and promoting consumer confidence.

### III. Recommended Additional Consumer Protections

We recommend several additional consumer protections.

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<sup>17</sup> Subsection (c)(1)(C)(ii) requires that the consumer's consent be electronic or that it be confirmed electronically, in a manner that reasonably demonstrates that consumer will be able to access the various forms of electronic records to which the consent applies. The requirement of a reasonable demonstration is not intended to be burdensome on consumers or the person providing the electronic record, and could be accomplished in many ways. For example, the "reasonable demonstration" requirement is satisfied if the provider of the electronic records sent the consumer an email with attachments in the formats to be used in providing the records, asked the consumer to open the attachments in order to confirm that he could access the documents, and request the consumer to indicate in an emailed response to the provider of the electronic records that he or she can access information in the attachments. . . . The purpose of the reasonable demonstration provision is to provide consumers with a simple and efficient mechanism to substantiate their ability to access the electronic information that will be provided to them.

106th Congress, 146 Cong. Rec. H4352-4353 (daily ed., June 14, 2000) (statement of Cong. Bliley).

<sup>18</sup> The ability to insist on electronic records is clearly approved by E-Sign. The consumer must be informed of  
the right of the consumer to withdraw consent to have the record provided or  
made available in an electronic form and of any conditions, consequences  
(which may include termination of the parties' relations), . . . .

15 U.S.C. § 7001(c)(1)(C)(i)(II).



**Provision of documents in same medium in which transaction is conducted.** As noted above, there is a greater danger that unscrupulous marketers will exploit the differences between paper and electronic documents to defraud consumers and prevent them from understanding the terms of a transaction. To deal unequivocally with this issue in state law, North Carolina recently enacted a flat rule that whenever a consumer conducts a "transaction on electronic equipment provided by or through the seller, the consumer [must] . . . be given a written copy of the contract which is not in electronic form."<sup>19</sup> This would prevent many unscrupulous business practices from flourishing as a result of the new electronic enabling laws. The North Carolina rule would ensure that the electronic transaction is not used as a subterfuge to avoid actually providing the consumer with information that the consumer needs and is legally entitled to receive. Specifically, we propose this language:

When the parties to a transaction in which one of the parties is a consumer are both physically present in the same location, or one party is present along with the agent of another, any contract, policy, notice, disclosure or other document provided at that time which is provided in a form other than orally must also be provided in the same medium, other than orally, in which sales materials are provided. This section does not prevent the additional delivery of the same documents by other means.

We urge the Federal Trade Commission and the Department of Commerce to recommend this additional protection.

**Assurance of receipt of electronic documents.** Assume that a financially savvy consumer shops for the best health insurance on-line.<sup>20</sup> The consumer finds that the most economical product requires that all communications between the insurance company, the consumer, and the medical providers be conducted entirely electronically. So, this consumer agrees to receive notices regarding his health insurance on-line. However, a year later, the consumer's computer breaks, and he is not in a financial position to purchase a new one. He does not have access to the Internet at work, and his obligations at work and to his family make it difficult for him to take the time it requires to go to a public access computer and wait to use the computers connected to the Internet. He also relies on his understanding that any notice of cancellation of insurance will be mailed to him.<sup>21</sup> As a result, when the insurance company decides to change its coverage policies of dependents and notifies all policy holders this consumer never gets his notice and is unknowingly left without insurance.

E-Sign fails to fully address the significant differences between the ease and lack of cost involved in receiving mail through the U.S. Postal Service, and the complexities, ongoing expense, and uncertainties involved with receiving email. The expense includes access to a working computer and access to the Internet. The uncertainties include Internet service provider failure, use of a stale email address and junk mail filtering programs that may incorrectly filter out the message. Computers crash, ISPs and email addresses change, and often there is no system for forwarding mail. Even corporate email systems seem to break down fairly frequently. Until email reaches the at least the degree of reliability of the U.S. Postal Service, care must be taken to assure that consumers actually receive important information that is sent electronically.

E-Sign's requirement for electronic consent provides only an imperfect protection against this danger. Requiring the consumer to go through the exercise to test his computer's capacity to access the information that will be provided henceforth electronically, at least alerts the consumer to the significance of the agreement to receive all

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<sup>19</sup> N.C.G.S. §66-308.16(d).

<sup>20</sup> Apparently, despite E-Sign, insurance cannot yet be purchased on-line. In fact the only new product that we were able to determine was available on-line that had not been available before the passage of E-Sign was guns.

<sup>21</sup> Notice of cancellation of health insurance is exempted from the electronic record provisions of E-Sign. 15 U.S.C. § 7003(b)(2)(C). However, even this provision may not apply in a state that has superceded the provisions of E-Sign by passing a law which meets the requirements of 15 U.S.C. § 7002(a)(1) or (2).

records in the future via an electronic mechanism. A better protection against this particular danger would be statutory language as follows:

Notices required to be provided, sent or delivered to a consumer shall be considered received only when the notice itself is opened, acknowledged, or automatically acknowledged by a flag that tells the sender it has been opened.<sup>22</sup>

The recommended language gives three ways to trigger effectiveness of a notice: 1) actual opening; 2) manual acknowledgment; or 3) a technological automatic acknowledgment received by the sender.<sup>23</sup>

E-Sign currently contains a number of important exemptions from the application of the rule that electronic records can replace paper records.<sup>24</sup> Examples include notices for cancellation of utility service or insurance coverage, foreclosure or eviction, and product recall. These consumer notices are all post-transaction notices. They will all be provided at some point *after* the consumer has consented to receive electronic notices. When establishing this list of exclusions, Congress recognized that computers do fail and the email addresses change. The problem is that this list is not sufficiently inclusive of all the types of notices that consumers need to be sure to receive. This language can actually replace the list of excluded notices because it would ensure that consumers actually receive all notices required to be provided to them.

**Mandate the consumer consent provisions on a nationwide basis.** In its present form, E-sign allows states to opt out of the consumer consent provisions. This creates the possibility of non-uniformity, requiring internet sellers to comply with different rules in different jurisdictions. It also potentially hampers the growth of e-commerce, by failing to provide the assurances of privacy and financial security that are the basis of consumer confidence. The consumer consent provisions should be made a uniform and nationwide standard, just as the Truth in Lending Act provides a uniform nationwide standard for consumer credit transactions.

**Assurance of Record Integrity.** Electronic records of important documents should be required to have the same degree of integrity, or prevention against alteration, as paper writings have. As the terms of a contract are generally proven by the written words on the document evidencing that contract, most of us are very careful to put the paper records of our important contracts in a safe place. Yet the requirements regarding the electronic *form* or *integrity* of an important document are at best unclear under E-Sign, as well as UETA

Electronic documents in word processing formats have as much integrity as writings on a chalkboard – none. A consumer cannot use a chalk board to prove the terms of a contract in court.

If a business posts a contract with a consumer to a website, and the consumer downloads the contract and saves it in word perfect, the consumer does not have an electronic version of the contract that the consumer can use to prove its terms in court. The same problem exists if the business emails the consumer the contract as a word perfect attachment. Once the consumer opens the document and saves it, it becomes a different version than what was sent. Even if the consumer has made no material change. This is because the consumer's word perfect version is likely to have a different date, it may be in different format, have a different font, etc. All of these things undermine the consumer's ability to prove that electronic record is exactly the same in all material terms as the contract to which he is bound.

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<sup>22</sup> Because of the fear of the spread of a virus, many people are afraid to open attachments. Required notices should only be included in the body of the email.

<sup>23</sup> We recommend that, as an additional question to be addressed, the FTC and the Department of Commerce seek information about the cost, availability, and effectiveness of technological automatic acknowledgment systems.

<sup>24</sup> 15 U.S.C. § 7003(b).

UETA's only requirement regarding record integrity<sup>25</sup> only requires that the electronic record

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

(2) remains accessible for later reference.

The electronic record does not need to remain accessible to *all parties*, particularly the consumer. Further, even this weak requirement is only triggered by another law's requirement that a document be *retained*, not that the record be in writing.

E-Sign does a better job at addressing the record integrity issue by vitiating the legal effect of an electronic record of a document required to be in writing if the "such electronic record is not in a form that is capable of being retained and accurately reproduced for later reference by all parties or person who are entitled to retain the contract or other record."<sup>26</sup> But even this standard is unclear in its effect. Neither law requires that a document be locked after it is signed. Turning this issue around, nothing prevents the fraudulent business from changing the terms of the contract, here either.

The important point here is that while we know that the business which wrote the contract will have an electronic version it can use to prove the terms in court, the law should require that the consumer also have a similarly useful electronic version. To address this issue we would propose that the application of an electronic signature essentially lock the electronic record. Specifically, our proposed language would be:

The electronic signature attached to an electronic record is only valid if is linked to the electronic record to which it relates, in a manner that, if the record or the signature is intentionally or unintentionally changed after signing the electronic signature is invalidated.

**Reasonable Assurance of Reliance on Authentication.** Both E-Sign and UETA authorize electronic signatures to take the place of physical signatures. Yet, there are no rules addressing the burden of proof, or the liability from, the misuse of an electronic signature. This is particularly important in the context of on-line contracts.

E-Sign and UETA both apply the rules for disputing a physical world signature to a repudiation of an electronic signature. But as the assumptions about physical signatures do not easily translate to electronic signatures, when these rules are applied to electronic signatures, consumers will suffer greater losses. In the real world context, in a court proceeding a person who denies that the signature on a paper contract is really his must present some proof before the party claiming under the signature is required to prove it is valid.<sup>27</sup> Proof that a

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<sup>25</sup> § 12(a), UETA.

<sup>26</sup> 15 U.S.C. § 7001(e).

<sup>27</sup> "Until evidence is produced that the signature is forged or unauthorized, the holder is not required to prove the signature's authenticity even if denied, in the answer and the holder in due course has the right to rely upon the presumption of authenticity. On motion for summary judgment the movant, who asserts forgery as a defense, has the burden of proof that the signature is not authentic and, if so, not authorized, even though the respondent holder in due course would have such burden at trial." *SouthTrust Bank v. Parker*, 226 Ga. App. 292, 486 SE2d 402, 405 (1997).

The UCC section referred to in the above case is section 3-308 of the UCC in the revision. The Official Comment says in part: "The burden is on the party claiming under the signature, but the signature is presumed to be  
(continued...)

person's signature was not made by that person is relatively easy to present; one can simply say "Look, it doesn't look like my signature, here is what my signature really looks like." Or "I was nowhere near the place the contract was signed on that day, I was at the beach, and here is my hotel receipt to prove that I was at the beach." Once some proof is provided challenging the validity of the signature, the rules as to which party then has the burden of proof on the validity of the signature vary depending upon whether the contract in question is governed by the Uniform Commercial Code or by common law contract law. But the significant point is that in both cases, in order to open up the question regarding the validity of the physical signature some proof must be provided.

E-Sign and UETA simply transfer these common law rules of burdens of proof to the validity of electronic signature. But these rules do not translate into a fair system in the context of electronic commerce. Asking a person to provide some proof that an electronic signature was not made by that person is asking a person to provide proof of a negative. All a person can really say is something along the lines of: "I did not sign that document." "It was not me that typed in the password, or the macro that initiated my digital signature." What kind of proof can an individual offer to show that they did not type in some letters or words in an electronic transaction? It will be virtually impossible for individual consumers to prove this negative. The result will be that many, many consumers will be forced to pay for goods or services they did not purchase, and from which they did not benefit.

Of course, these concerns may not apply when electronic signatures are based upon biometrics. But E-Sign and UETA contemplates covers all types of electronic signatures, the typing of one's initials, a digital signature, or a thumb print, and more.

There is a better framework to apply to electronic signatures than simply the common law rules of physical signatures: the rules created by this Congress for the use of credit cards under the Fair Credit Billing Act.<sup>28</sup> Congress realized when the credit card system was authorized that it was logical and appropriate to put the risk of loss from fraud, theft, or system failure on the industry creating and maintaining the credit card system. The clear beneficiaries of this statutory transfer of risk of loss: the credit industry which has enormous profits from credit cards, and merchants for whom the use of credit cards facilitates millions of dollars of sales each year.

An electronic signature is much more like a credit card than it is like a physical signature. It is an electronic device which binds the holder of the credit card to a promise to pay. An electronic signature is also an electronic device – outside the body of the owner – which can bind the owner to a promise to pay. Unauthorized use is a likely possibility in many situations. Who should bear the burden of loss when this occurs?. If the use of electronic signatures is left to the rules applied to physical signatures, consumers will bear the cost. This will neither be fair, nor will it appropriately facilitate electronic commerce. A better rule would be to put the burden of proof of unauthorized use of electronic signatures on the merchant in merchant to consumer transactions. This will force the electronic commerce industry to create a system for using and accepting electronic signatures that limits losses from fraud, mistake, theft and system breakdowns to an absolute minimum – because the creators of the system will bear the losses. Our proposed rules would be:

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<sup>27</sup>(...continued)

authentic and authorized except as stated in the second sentence of (a) ["if the validity...is denied"] "The defendant is therefore required to make some sufficient showing of the grounds for the denial before the plaintiff is required to introduce evidence. ...Once such evidence is introduced, the burden....is on the plaintiff" But note the following in the Comment "The presumption [of validity] rests upon the fact that in ordinary experience forged or unauthorized signatures are very uncommon, and normally any evidence is within the control of, or more accessible to, the defendant." In the electronic environment, this is arguably no longer true.

<sup>28</sup> 15 U.S.C. § 1666. October 28, 1974 (88 Stat. 1513).

1. Electronic contracts must be required to use electronic signatures which are reasonably linked to the contracting parties.
2. Electronic signatures must only be permitted to replace physical signatures when the risk of loss from the failure of the authentication technology, either through fraud, mistake, technological failure or theft falls on the merchant. In consumer to consumer transaction, the risk of loss can be determined by agreement.

#### IV. Conclusion

E-Sign's requirement that consumer consent be given or confirmed electronically is of crucial importance. Paper consent to future electronic transactions creates a risk that consumers will be offered boilerplate paper agreements to receive future electronic notices that they may or may not be able to open and read. The federal requirement that consent be given or confirmed electronically eliminates this risk, at least for notices legally required to be in writing. In contrast, UETA merely requires agreement, but does not specify how that agreement is to be proven. Instead, UETA states that agreement can be determined from the context and circumstances.<sup>29</sup> UETA undercuts its own basic premise of agreement by permitting the agreement to conduct transactions electronically to be found from the context, including conduct. UETA also permits an agreement to receive future electronic notices to be given only on paper.

Some may argue that the current regime of requiring electronic consent may be burdensome in some situations. We believe the benefits – or the protections provided against anticipated dangers to consumers – clearly outweigh any burdens.

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<sup>29</sup> UETA §5.