INTRODUCTION

Currently, many businesses form contracts by communicating electronically between their respective computers through a process known as "electronic data interchange" (EDI). EDI allows parties to send standardized forms such as purchase orders, invoices, and shipping notices back and forth. EDI is both a convenient and an efficient substitute for transmitting conventional paper documents between parties. As more businesses elect to contract by EDI, the question of the enforceability of these types of contracts becomes critical. This memorandum highlights the legal uncertainties that are raised by the formation of contracts by EDI and makes various proposals which should decrease or eliminate these uncertainties.

The memorandum is divided into three sections. Section I discusses whether contracts formed by EDI are enforceable under current California law. Furthermore, section I discusses the benefits and ramifications of utilizing the American Bar Association’s Model Electronic Data Interchange Trading Partner Agreement(Note 1) in electronic contracting. The Model Agreement represents the ABA's attempt to create certainty with respect to the enforceability of EDI contracts between two commercial trading partners by creating a master agreement which the trading partners agree will control when legal issues arise due to EDI contracting. Section II discusses whether the Model Agreement itself is enforceable under California law. In other words, will the California courts find such an agreement to be binding upon the parties using the Model Agreement and, more importantly, will enforcing the agreement effectively resolve the legal uncertainties EDI contracting raises.

Section III discusses revising current California law in order to accomplish the same
results as the Model Agreement, namely eliminating legal uncertainties raised by contracting through EDI. The basic question discussed in this section is whether the California legislature should consider changing California law in order to eliminate the legal uncertainties that arise when contracts are formed by EDI.

Analysis

I. Enforceability of EDI Contracts under Current California Law

Current California law with respect to the enforceability of EDI contracts is uncertain. Neither California nor federal courts have addressed the present issue. EDI contracts, however, create obvious uncertainties. The most important concerns of a party seeking to enforce an EDI contract are (1) the implications of the Statute of Frauds which requires that certain contracts be (a) written and (b) signed; (2) the legal ramifications of the transmittal and receipt of EDI messages; (3) the rules of evidence governing the admissibility of documents stored electronically; (4) the role and legal effect of existing terms and conditions established between trade partners before their establishment of EDI; and (5) the potential for astronomical damage claims against parties utilizing EDI due to EDI failures or malfunctions.

Each of these legal concerns will be discussed in order to determine the likely legal consequences under current California law. Further, the Model Agreement's response to each of these legal issues and the likely legal outcomes of these issues under the Model Agreement will also be discussed. It is hoped that this method of analysis will demonstrate not only the efficacy of the Model Agreement, but also the areas of current California law that make contracting by EDI such a legal uncertainty.

1. Statute of Frauds

The Statute of Frauds requires that certain types of contracts be in "writing" and "signed." The most common transaction to which the Statute of Frauds applies is in contracts for the sale of goods valued over $500. (Note: 3) See Cal. Com. Code 2201(1) (West 1994); see also U.C.C. 2-201 (1992). Thus, a contract for the sale of goods valued over $500 will be unenforceable unless there is a "writing sufficient to indicate that a contract for sale has been made between the parties and signed by the party against whom enforcement is sought . . . ." See Cal. Com. Code 2201(1) (West 1994); see also U.C.C. 2-201 (1992). The critical issue therefore is whether contracts communicated and stored in computers fulfill the California Commercial Code's (Code) definitions of "written" and "signed."

The Code defines a document as "signed" if the document includes "any symbol executed or adopted by a party with present intention to authenticate a writing." Cal. Com. Code 1201(39) (West 1994); see also U.C.C. 1-201(39) (1994). Courts have yet to address the issue of whether documents sent by electronic messaging systems satisfy the Code's definition of "signed." Related case law concerning paperless transmission of documents by telegraph, facsimile and telex, however, supports the conclusion that an EDI contract transmitted with the requisite intent by a party may be "signed" as required by the Code. See Commercial Use of Electronic Data Interchange--A Report and Model Trading Partner Agreement 45 Bus. Law. 1687 (1990) citing Joseph Denuzio, 79 F. Supp. 117 (1987) (court held that "signature" existed where parties sent telegrams and
telexes with the requisite intent to authenticate the writings). Nevertheless, the lack of directly applicable legal precedent leaves this question unanswered.

The Code defines a "writing" as "printing, typewriting or any other intentional reduction to tangible form." Cal. Com. Code 1201(46) (West 1994); see also U.C.C. 1-201(46) (1994). Once again, however, there is a complete lack of legal precedent concerning whether impulses stored on computer readable material satisfy the Code's definition of a "writing." Furthermore, the analogy to telegraphs, facsimiles and telexes is not very persuasive in this instance due to the fact that these forms of transmission all inevitably result in a "writing" once transmission is complete. Communications between computers, however, are often only stored electronically. (Note: 4) Although the data stored electronically can be printed at a later time, these EDI printouts do not have the "immutability" of a paper-based writing. Sharon DiPaolo, The Application of the Uniform Commercial Code Section 2-201 Statute of Frauds to Electronic Commerce, 13 J. L. & Com. 143, 147 (1993). In other words, the reliability of EDI printouts may be questioned in court due to the fact that these electronic data files, unlike their paper counterparts, may be altered or deleted without a trace. Id. In sum, this issue is also very much unanswered under current California law.

2. The model agreement's response to the Statute of Frauds

The Model Agreement utilizes two different strategies in order to bring EDI transmissions within the requirements of the Statute of Frauds. First, the Model Agreement adopts a "definition strategy." Id. at 1960. Thus, any document which has been properly transmitted pursuant to the terms of the Model Agreement is defined as a "writing" by the Model Agreement. Id. In addition, the Model Agreement defines "signature" as "any identification consisting of symbols or codes which are adopted by a party and electronically affixed to or contained in Documents transmitted by such party." Id. Furthermore, when affixed or contained in an EDI transmission, any such signature is expressly accepted by such party as sufficient to verify that such party originated the related document. Id. Lastly, the Model Agreement provides that any "writing" with an affixed "signature" shall be deemed "signed" and shall constitute an original when printed from electronic files or records established and maintained in the normal course of business. Id. Thus, a properly transmitted document containing the "signature" of the originating party should be sufficient to satisfy the formal requirements of the Statute of Frauds because both parties have specifically defined "signed" and "writing" broadly enough to include EDI contracts. Id.

The second strategy employed by the Model Agreement to bring EDI contracts within the Statute of Frauds is the use of the estoppel doctrine. Section 3.3.4 of the Model Agreement contains a promise by each party to not contest the validity or enforceability of "signed documents" under the provisions of any applicable law. Thus, either party may assert estoppel in order to bar the reliance upon the Statute of Frauds.

For example, assume A and B have adopted the Model Agreement but B is refusing to perform a contract that was formed through EDI. A may go to a court of law and seek to recover damages which have resulted due to B's breach of the contract. If B attempts to raise the Statute of Frauds as a defense (B argues there is no enforceable contract with A because the contract does not satisfy the Statute of Frauds requirements), B will be estopped (prevented) from doing so by section 3.3.4.
3. Legal ramifications of receipt and transmittal of EDI messages under current California law

Generally, California law applies the "mailbox rule" where (1) the contracting parties are not in each other's presence and (2) the means of communication utilized to transmit offers, acceptances, modifications, revocations and other messages result in a delay between the dispatch and receipt of those communications. For example, the "mailbox rule" would apply to offers, acceptances, modifications and revocations sent by mail. Whether the "mailbox rule" would apply to EDI transmissions is uncertain. However, EDI transmissions do satisfy the two requirements listed above for the application of the "mailbox rule"; thus, it is possible that the courts may apply the "mailbox rule" to EDI transmission.

The "mailbox rule" applies different legal rules upon the transmittal and receipt of messages depending on the type of communication sent. For example, where an offer sent by letter specifies that the power of acceptance will be kept open for a certain amount of time (e.g., three days), the "mailbox rule" mandates that the period is measured from the time the offer is received. So, assume A sends an offer to B on Day 1 and the offer declares that it will only be available for three days. If B receives the offer on Day 5, B will still have until Day 8 to accept. If, however, B sends an acceptance of the offer to A, the acceptance becomes effective upon dispatch. In other words, B is deemed to have legally accepted A's offer when B deposits the acceptance letter into the mailbox. Lastly, it is important to note that current California law does not require the parties to verify receipt of these communications. So, under general California law B would have no legal duty to notify A when B receives A's offer by mail.

4. Model Agreement's rules governing receipt, transmittal and verification

The Model Agreement "constructs an environment in which receipt, and not transmission, determines the legal effect of any message transmitted by EDI, and in which verification of the transmission is a mandatory element of conducting business with EDI." In other words, the relevant legal event is the receipt of EDI messages, not the transmittal of EDI messages. Furthermore, verification of receipt of EDI messages is mandatory. These general principles are enforced by several different sections of the Model Agreement. First, Section 2.1 of the Model Agreement provides that no document shall give rise to any obligation until "properly received." "Properly received" is specifically defined as requiring that the transmitted document be accessible at the computer selected by the receiving party which must be designated in the Appendix of the Agreement.

Thus, an offer transmitted by EDI from A to B is not an effective offer until it is properly received (accessible on B's computer) by B. So, if A's EDI offer is never properly received by B for one reason or another, then B cannot validly accept A's offer even if B learns about the attempted offer through another channel of communication with A. The same logic applies for acceptances transmitted by EDI. So, if in the above example, B had properly received A's offer and had transmitted an acceptance of this offer to A, this acceptance is not valid until it is properly received (i.e. accessible on A's computer) by A. Thus, if B transmits the acceptance on Day 1 and A does not properly receive the acceptance, A may still on Day 2 revoke the offer by transmitting a revocation to B. The revocation must also be properly received by B.
Second, the Model Agreement’s definition of "properly received" does not require that a document be actually examined, only that the document be accessible. Thus, to the extent a receiving party delays reviewing the message, the receiving party bears the risk incident to not having had an opportunity to respond to the transmitted message at an earlier time. \textit{Id.} at 1669.

It is important to note that the fact that a document has been properly received does not, by itself, bestow it with legal significance. The document must still satisfy applicable precedents established by the U.C.C. or common law in order to have legal effect. In other words, the transmitted document must still be within California’s definition of an offer/acceptance, there must be consideration and the agreement must be enforceable.

Third, the Model Agreement also imposes an affirmative obligation upon the party receiving any document, upon proper receipt, to promptly and properly transmit in return a message(Note: 8) verifying receipt of the original document. \textit{Id.} at 1669. Thus, if the originating party does not receive the verification, then she is on notice that the communication may not have effectively occurred. Whether verification has been provided will not alter the legal significance of the initial document which has been properly received. \textit{Id.} at 1670. In the example above with A and B, if B’s transmitted acceptance had been properly received by A but A had failed to notify B of its proper receipt, B’s acceptance is valid and the contract between A and B is enforceable.

Finally, the Model Agreement provides that proper verification shall constitute conclusive evidence of the proper receipt of any document. \textit{Id.}

5. Evidentiary concerns under current California law

Another legal concern of those contracting through EDI is whether an EDI contract would comply with the rules of evidence governing the admissibility of electronically stored documents. In other words, it is important that the records of EDI transmissions be admissible as evidence in a court of law in the event that one party must go to court to enforce an EDI contract. Under current California law, two rules must be satisfied before a writing will be admissible to prove the contents of the writing: (1) the best evidence rule and (2) the hearsay rule.

The best evidence rule requires the original writing to be produced when a party is attempting to prove the contents of the writing. See Fed. Rules of Evidence 1002. So, under California law, an EDI contractor who is attempting to introduce into evidence EDI transmissions that have been stored electronically must produce the original transmissions. Whether a printout of this electronically stored data will constitute an original for the best evidence rule purposes is uncertain.

The hearsay rule denies admissibility into evidence to written and oral statements made outside of the courtroom and produced by the party to prove the truth of the matter asserted. General application of the hearsay rule would deny admissibility to EDI contracts. However, it is probable that EDI contracts would qualify under Federal Rules of Evidence 803(6) as an exemption to the hearsay rule.

Computerized business records are exempt from the hearsay rule to the extent such records constitute "data compilation, in any form, . . . made at or near the time by . . . a person with knowledge, if kept in the course of regularly conducted business activity, and if it was the regular practice of that business activity to make the . . . data compilation."
6. Model Agreement's response to evidentiary concerns

The Model Agreement accommodates the best evidence rule by stating that the original of "data" stored in a computer is "the printout or other output readable by sight, [and] shown to reflect the data accurately." Id. at 1695. Accordingly, signed documents will be admissible to the same extent as other business records originated and maintained in documentary form. Id.

As to the hearsay rule, EDI transmissions are likely to be admissible under current California law. However, the Model Agreement also contains a non-contest covenant which should prevent a party from asserting the hearsay rule to prevent the introduction into evidence of EDI documents. Essentially, this covenant will work in the same manner as the provision regarding the Statute of Frauds (discussed above) which prevents a party from using the Statute as a defense to EDI contracts. Here, however, it is the hearsay rule (not the Statute of Frauds) which the party is prevented from relying upon.

7. Terms and conditions

Often trade partners have a commercial relationship which existed prior to their use of EDI to contract. During this prior commercial relationship, the parties may have specified terms and conditions which define the dimensions of their commercial relationship and which normally apply to conventional paper purchase and sale transactions. For example, A and B may have agreed that A will pay for the cost of shipping and insurance of all goods that B purchases from A. The legal question raised is whether these terms and conditions should also apply to EDI contracts. Again, this question has yet to be answered by either the California legislature or courts. In sum, the probable outcome under current California law is uncertain.

8. Model Agreement's response to pre-existing terms and conditions

The Task Force of the Model Agreement determined that the terms and conditions that normally apply to conventional paper purchase and sale transactions should, in some circumstances, also apply when these contracts are formed through EDI. See 3.1. Thus, to the extent EDI activity facilitates(Note: 9) the terms of an existing master purchase agreement, the terms and conditions of the master purchasing agreement control. Commercial Use of Electronic Data Interchange--A Report and Model Trading Partner Agreement 45 Bus. Law. 1698. In the absence of an existing master purchase agreement, the additional terms and conditions that apply to EDI contracts are either (i) specified as the terms and conditions negotiated and agreed upon between the parties, (ii) defined to be the terms and conditions of the parties' respective paper forms, or (iii) such additional terms and conditions as may be determined in accordance with applicable law (see below for examples). Id.

Finally, section 3.1 of the Model Agreement states that the Agreement is "to be considered part of any other written agreement referencing it or referenced in the Appendix." See Model Agreement 3.1. Thus, the parties are permitted to incorporate the Model Agreement by reference into an existing master purchasing agreement. Finally,
terms of the Model Agreement shall prevail in the event of any conflict with any other terms and conditions applicable to commercial transactions between the trade partners. \textit{Id.} This last sentence of section 3.1 confirms that the parties intended that the Model Agreement not be contradicted by other terms and conditions applicable to any other transaction. For example, a separate contract may provide for acceptance, in a paper-based environment, to occur upon receipt of a signed purchase order by certified mail. Section 3.1, however, provides that the acceptance mechanism established pursuant to the Model Agreement will nevertheless control with respect to EDI transmissions. \textit{See Model Agreement 3.1, cmt. 9.}

To illustrate the above mentioned rules, assume first that A and B have an existing master purchase agreement which calls for A to pay for the cost of shipping and insurance of all goods that B purchases from A. If a contract between A and B is formed through EDI, this term (A will pay for shipping and insurance) will be incorporated into the EDI contract. Thus, A will pay for the insurance/shipping in EDI contracts also.

If, however, there is no existing master purchase agreement between A and B, what additional terms and conditions should apply? The Model Agreement lists three alternatives: (i) A and B can negotiate which terms and conditions will apply, (ii) the respective paper forms of A and B may supply the terms and conditions, or (iii) the UCC will supply the appropriate supplemental terms.

Under alternative (i), if B wants A to pay for shipping/insurance, B must negotiate and come to an agreement to this effect with A. The negotiated term should then be included in the Appendix of the Model Agreement.

Under alternative (ii), each parties' standard printed forms are incorporated into the Model Agreement (these forms should be attached in the Appendix). Thus, the additional terms and conditions are those normally included in these standard forms. So, if B's standard printed purchase form includes terms and conditions which call for the seller to pay for insurance and shipping costs of goods B purchases, this will become part of an EDI contract between A and B. Those terms and conditions included in A's standard forms will also be included in an EDI contract. If the forms contain inconsistent terms and conditions, for example A's form states that A will not pay for shipping/insurance and B's form states that the seller (A) shall pay for shipping/insurance, the conflict is resolved according to UCC section 2-207.

Under alternative (iii), the parties agree to incorporate into each contract the manner by which applicable law determines additional terms and conditions which have not been agreed upon by the parties. Essentially, this means that the UCC will determine the additional terms and conditions. So if A and B form a contract by EDI but leave open the place of delivery for the goods sold, the UCC will determine which place is the appropriate place for delivery.\textit{(Note: 10)}

\textbf{9. Liability and damages under California law}

In most circumstances, a party who has been injured by another's breach of contract may recover two types of damages: (1) direct or general damages and (2) special or consequential damages. General damages are those damages a reasonably prudent person should have foreseen as resulting from a party's breach. Consequential damages are remote or unusual damages which have resulted from a party's breach. General
damages are always awarded to a prevailing party in a breach of contract action. Consequential damages, on the other hand, are only awarded if the party who breached had actual notice of the possibility of this type of damage. Lastly, it is important to note that the parties are able to allocate the risks of breach among themselves by express agreement. In other words, the parties may agree that a breaching party will be responsible for all resulting damages, general and consequential.

10. Liability under the Model Agreement

Section 4.6 of the Model Agreement limits the potential liability between the trade partners. See Model Agreement 4.6. Specifically, there shall be no liability between the parties for "any special, incidental, exemplary or consequential damages arising from the actual use of EDI." See Commercial Use of Electronic Data Interchange--A Report and Model Trading Partner Agreement 45 Bus. Law. 1702. However, section 4.6 only limits liability for those types of damages arising from the actual use of EDI. Thus, section 4.6 is not intended to restrict the liability of the parties relating to performance or non-performance of the underlying transactions. Id. Section 4.6 only limits liability that results from "any delay, omission or error in the electronic transmission or receipt of any Document pursuant to this Agreement." Id.

Furthermore, the Model Agreement also contains a provision which specifically excuses either party from liability in the event of a mechanical or electronic failure which is beyond the parties' reasonable control and which prevents the transmission or receipt of documents. (Note: 11) Id.

II. Validity and Enforceability of the Model Agreement

The enforceability of EDI contracts between trade partners utilizing the Model Agreement will depend upon the validity and enforceability of the Model Agreement itself. Thus, a central issue is whether the Model Agreement is enforceable under current California law.

The Model Agreement defines the parameters of an EDI commercial relationship consistently with two of the fundamental purposes of the California Commercial Code (Code), specifically: (1) to simplify, clarify and modernize the law governing commercial transactions and (2) to permit the continued expansion of commercial practices through custom, usage and agreement of the parties. See Cal. Com. Code 1102(2)(a)-(b) (West 1994); see also U.C.C. 1-102(2) (1988). Further, the Code states that parties are free to vary the effect of the provisions of the Code (Note: 12) by agreement except that the general obligations of good faith, diligence, reasonableness, and care may not be changed. See Cal. Com. Code 1102(3) (West 1994); see also U.C.C. 1-102(3) & Official Comments 2,3 (1988).

In addition, the Model Agreement is structured to provide a framework for the parties to proceed through a decision-making process which will confirm their mutual intent to give legal significance to their EDI transmissions. Commercial Use of Electronic Data Interchange--A Report and Model Trading Partner Agreement 45 Bus. Law. 1660.

California courts are likely to conclude that the Model Agreement is a valid and enforceable agreement for two reasons: (1) the above mentioned goals of the Code are furthered by this type of agreement and (2) the express language in the Model Agreement is sufficient to demonstrate conclusively to the courts that the parties to such
agreement have the mutual intention of creating valid and enforceable obligations by the
electronic communication of data. See Model Agreement Recitals, cmts. (2-3). The Code
courages the use of agreements such as the Model Agreement, especially under those
circumstances where these agreements tend to simplify, clarify or modernize commercial
transactions. See Cal. Com. Code 1102(3) (West 1994); see also U.C.C. 1-102(3) cmts.
(2-3) (1988). Undoubtedly, the Model Agreement is intended to clarify and modernize
commercial transactions between EDI partners. Thus, the Model Agreement is
completely consistent with the Code and the courts should have no hesitation in
enforcing such agreements (especially in light of the parties mutual intention of creating
enforceable obligations by EDI).

III. Revision of Current California Law

As noted above, it is unclear under current California law whether an EDI contract
satisfies the requirements of the Statute of Frauds. Complete abolition of the Statute of
Frauds or, alternatively, the revision of current California Commercial Code definitions of
"writing" and "signature" would provide the simplest solution to this important problem.
Revision of current California law is critically important for, although trading partner
agreements will continue to facilitate electronic commerce between trading partners,
these types of agreements do not protect all potential participants in electronic
commerce. Eventually, parties who do not have a previous trading relationship will be
utilizing electronic messaging to buy and sell goods. Furthermore, ordinary consumers
may, in the future, be using EDI to purchase goods.

Therefore, at the minimum, the California Legislature should consider redefining the
current California Commercial Code (Code) definition of "writings" to include "any
commercially reasonable and permanent reduction or recording that is retrievable and
capable of being presented in a visual form." Deborah Wilkerson, Electronic Commerce
Under the U.C.C. Section 2-201 Statute of Frauds: Are Electronic Messages
Enforceable?, 41 Kan. L. Rev. 403, 426 (1992). Also, the California Legislature should
consider redefining the current Code definition of "signature" to include "any set of
computer symbols, names, codes, or words adopted by a party and affixed to or included
in an electronically transmitted document with the intent to authenticate the message." Id.
at 426-27. A party may select as its signature any of a variety of names or symbols
including the use of the party's name on the document. See Model Agreement 1.5 cmt.
(2). The crucial requirement is that the adopted symbol reflect the intent to authenticate
required by the California Commercial Code. Id.

Finally, it is important to note that in recent years the Statute of Frauds has been severely
criticized by both the courts and legal commentators, many of whom currently advocate
the Statute's repeal. Id. at 1689. Originally designed to prevent fraud, many feel that the
Statute is either no longer needed, ineffective or, ironically, used to facilitate fraud. Critics
of the Statute of Frauds feel that the Statute often unfairly bars proof that a contract has
been made and thus may result in inequitable conclusions to legal controversies. In fact,
many commentators believe that "repeal in the United States of the Statute of Frauds" is
a distinct possibility. Id. Interestingly, the most current proposed revision of the U.C.C.
Article II has dropped section 2-201's Statute of Frauds requirement. In sum, the
California Legislature should consider the many criticisms of the Statute of Frauds when
weighing the benefits of revision or, alternatively, repeal of the Statute.

Eliminating California's requirement of the Statute of Frauds or expanding the definitions
of "written" and "signed" to include electronically stored documents affixed with individual's adopted symbols would effectively eliminate the legal uncertainties raised by the formation of contracts through EDI. Until the California legislature either revises or repeals California's Statute of Frauds requirement, however, parties utilizing EDI for contracting purposes will be limited to one of two alternatives: (1) remain unprotected against these legal uncertainties or (2) rely upon trade agreements similar to the Model Agreement to ensure the enforceability of their electronic dealings.

Notes

Note: 1. The Model Agreement was prepared by the Electronic Messaging Services Task Force, a Subcommittee on Electronic Commercial Practices for the Uniform Commercial Code. A copy of the Model Report is attached.

Note: 2. As of September 24, 1994.

Note: 3. Examples of other types of contracts that are within the Statute of Frauds are: (1) an agreement that by its terms is not to be performed within a year from the making thereof and (2) contracts for interests in real property. Cal. Civ. Proc. 1624(a), 1971 (West 1994).

Note: 4. In fact, if these communications are not stored electronically and instead the parties are forced to print a hard copy of each transmission, the usefulness and efficiency of using EDI to contract is greatly undermined.

Note: 5. The "mailbox rule" is a legal rule that establishes the legal effect of receipt and transmittal of contractual communications.

Note: 6. Or sent by EDI.

Note: 7. The Appendix is used to set forth information essential to the proposed trading relationship.

Note: 8. The format of the verification is a specific type of Document called a "functional acknowledgement." See Model Agreement 2.2.

Note: 9. In other words, the use of EDI transmissions in furtherance of an existing master purchase agreement. For example, A has agreed to purchase from B 100 widgets. The subsequent use of EDI transmissions by A to fulfill this obligation (i.e. ordering widgets by EDI) will be subject to the terms and conditions of the existing master agreement.

Note: 10. "Quantity" will not be determined by the UCC supplemental provisions.

Note: 11. For example, an earth quake, hurricane, flood or other acts of God which prevent the parties from transmitting and receiving any Documents.