

The Future of Electronic Contracts in International Sales: Gaps and Natural Remedies under the United Nations Convention on Contracts for the International Sale of Goods

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¶1 When Eastman Kodak accidentally placed a camera for sale on its United Kingdom (“UK”) website for £100 instead of £329, word spread within hours.¹ Customers placed thousands of orders before the company could correct the error—at great expense to Kodak.² After informing customers of its mistake and stating that it would not fill the orders, Kodak faced a choice: honor the orders or cave to a lawsuit.³ While Kodak tried to argue that the orders were simply bids to accept its offer for sale, the company overlooked the crucial fact that its website accepted and confirmed the orders—forming an online contract.⁴ Kodak quickly succumbed to customer outrage and honored the lower prices—a data entry error that cost them US\$2 million.⁵ When asked about the mishap and whether customers could have won their lawsuit, Kodak simply remarked: “[i]nternet trading is a grey area.”⁶

¶2 Data entry mistakes occur easily in sales transactions, but they can often be reduced through party interaction. However, when mistakes originate from online transactions, the effect is magnified by the speed at which information is communicated to and acted upon by customers.⁷ In today’s electronic landscape, parties can instantly agree to, confirm, and communicate assent with just a few keystrokes.⁸

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¹ Jean Eaglesham, *A Troubled Deal on the Internet*, FIN. TIMES, Feb. 11, 2002, available at 2002 WL 3306015.

² *Id.*

³ *Id.* Kodak argued that “all orders placed on our website legally constitute offers to purchase from us, just like taking goods to the till in a retail store.” However, an alternative view exists. These transactions are offers to sell. A customer accepts the offer in the seller’s preferred method of acceptance: placing the order.

⁴ *Id.*

⁵ *Id.*

⁶ *Id.*

⁷ “Tasks that once required dozens of workers, weeks of preparation, and additional time for delivery may now be completed in minutes by one person using a computer connected to the Internet.” Donnie L. Kidd, Jr. & William H. Daughtrey, Jr., *Adapting Contract Law to Accommodate Electronic Contracts: Overview and Suggestions*, 26 RUTGERS COMPUTER & TECH. L.J. 215, 217 (2000); see also PRESTON GRALLA, *HOW THE INTERNET WORKS* 8 (Karen Reinisch ed., 4th ed. 1998).

⁸ See discussion *infra* Part I.A.2.

¶3

It was predicted that over 600 million people would have Internet access and spend over US\$1 trillion online in 2003.⁹ Over eighty-three percent of worldwide online sales will come from business-to-business (“B2B”) commerce,¹⁰ growing to eighty-eight percent by 2006.¹¹ Simple computer-based contracts will be formed to facilitate these transactions. Indeed, they are formed every day—from a consumer purchasing a camera from a website with a simple click of a “Place Your Order” button to distant merchants acquiring millions of durable goods from each other through complicated automated transactions.¹² Legal scrutiny around the formation of computer-based contracts affects consumers and businesses engaging in international trade.¹³ While most consumers enjoy the security of domestic consumer protection laws to shield them from incorrect, incomplete, or fraudulent computer-based transactions,¹⁴ commercial entities have different legal resources embracing their transactions.¹⁵ Recourse remedies differ based upon the international jurisdictions of the transacting parties.¹⁶ These complications lead commercial entities to question which laws govern international sales transactions. Where does the line between informal communication of an offer and formal acceptance begin? On which party’s laws would a legal judgment hinge? Could everyday business activities, such as simply sending an e-mail with a default “signature” attached to it, create a binding contract?¹⁷

⁹ Mark W. Vigoroso, *The World Map of E-Commerce*, E-COMMERCE TIMES, Apr. 2, 2002, at <http://www.ecommercetimes.com/perl/story/16942.html> (last visited Jan. 26, 2004).

¹⁰ *Id.*

¹¹ *Id.*

¹² See Amazon.com, at <http://www.amazon.com> (last visited Jan. 31, 2004), as an example of consumer online contracting. Amazon.com customers select items from the online catalog and place them in a virtual shopping cart. After providing customer identification, billing, and shipping information, customers click on the “Place Your Order” button to execute the completed order, which is verified and confirmed by e-mail to the customer. See also Amazon.com, Inc. v. Barnesandnoble.com, Inc., 239 F.3d 1343, 1347 (Fed. Cir. 2001) (where Amazon.com sued Barnesandnoble.com for patent infringement over its “1-click®” ordering system which enabled customers to select an item for purchase and complete and verify the purchase in one step). For a complete technical understanding of online shopping, see generally GRALLA, *supra* note 7, at 256.

¹³ See generally Edward Lee, *Rules and Standards for Cyberspace*, 77 NOTRE DAME L.R. 1275, 1278-81 (2002) (arguing that laws have to keep pace with cyberspace).

¹⁴ See Christopher T. Poggi, *Electronic Commerce Legislation: An Analysis of European and American Approaches to Contract Formation*, 41 VA. J. INT’L L. 224, 241 (2000).

¹⁵ See generally U.C.C. §§ 2-100, 2-102, 2-105, and 2-210 (1998) (where commercial contracts greater than US\$500, in any form, as well as services incidental to the contract are governed by the UCC); see also Berkeley Center for Law and Technology, *The Impact of Article 2B*, available at <http://www.law.berkeley.edu/institutes/bclt/events/ucc2b/draft/preface.html> (last visited Jan. 28, 2003) (comparing Article 2B’s inclusion of information technology issues generally unaddressed by Article 2). For contracts outside the U.C.C., the consumer relies on common law.

¹⁶ Jurisdiction and choice of law are primary issues with international business transactions. Kidd & Daughtrey, *supra* note 6, at 274-75 (citing the CISG as a potential solution to international contracting concerns).

¹⁷ See Colleen M. Coyle & Lisa Maria Wetzel, *Think Twice About “Signing” an E-mail: You Just May Create a Binding Contract*, METRO. CORP. COUNS., Aug. 2002, at 18 (col. 1), WL 8/02 METCC 18, (col. 1). Clicking on a hypertext link creates binding manifestation of intent even though no personal identification mark is associated with the assenting party; see also Anthony M. Balloon, Comment, *From Wax Seals to Hypertext: Electronic Signatures, Contract Formation, and a New Model for Consumer Protection in Internet Transactions*, 50 EMORY L.J. 905 (2001) (explaining the effect of electronic signatures as the result of the United States passing “E-Sign,” the Electronic Signatures in Global and National Commerce Act, 15 U.S.C.A. § 7001 (1998) [hereinafter E-SIGN]).

¶4 Such complex sales situations *on paper* are the genesis behind the United Nations Convention on Contracts for the International Sale of Goods (“CISG”),¹⁸ the uniform sales law for two-thirds of nations participating in world trade,¹⁹ when “most international transactions [were] completed without difficulty.”²⁰ The CISG is the “uniform international law for the most basic transaction of international commerce”—a contract.²¹ Today’s information economy challenges traditional notions of both time and place because improved communication technology enables business to flow freely across borders, “ris[ing] above spatial boundaries,”²² facilitating an instantaneous ability to form paperless contracts.²³

¶5 The CISG’s inception occurred over seventy years ago, and its finalized form was ratified over twenty years ago—at least a decade before electronic contracts became a practicable business solution.²⁴ Within this time, the CISG has remained unchanged, including one remarkably important yet surprisingly overlooked article that defines a contractual *writing*: Article 13.²⁵

¶6 Article 13 describes an international sales contract *writing* in the following manner: “[f]or the purposes of this Convention ‘writing’ includes telegram and telex.”²⁶ Accordingly, the term *writing* deems telegram and telex as acceptable contracting methods, but remains silent on computer-based contracts, such as electronic data interchange (“EDI”), the Internet, click-wrap and shrink-wrap agreements, and e-mail.²⁷ As a result, the CISG, the seminal convention governing international sales, contains a vital gap by remaining silent on electronic or computer-based contracts in international sales transactions.²⁸ This gap questions legitimacy of Twenty-first Century commercial

¹⁸ *United Nations Convention on Contracts for the International Sale of Goods*, April 11, 1980, U.N. Doc. A/CONF.97/18, reprinted in 19 I.L.M. 671 (1980) [hereinafter CISG].

¹⁹ See Pace Law School Institute of International Commercial Law, at <http://www.cisg.law.pace.edu> (last visited Jan. 26, 2004). The Pace Law School website is the foremost Internet authority on CISG. It is “the first Website used as a source in a US [sic] international commercial law judgment.” Camilla Baasch Andersen, *Furthering the Uniform Application of the CISG: Sources of Law on the Internet*, 10 PACE INT’L L. REV. 403, 407 (1998); see also UNILEX, *Contracting States*, at <http://www.unilex.info/dynasite.cfm?dssid=2376&dsmid=13351&x=1> (last visited Jan. 26, 2004).

²⁰ JOHN O. HONNOLD, UNIFORM LAW FOR INTERNATIONAL SALES UNDER THE 1980 UNITED NATIONS CONVENTION, viii (3d ed. 1999). John O. Honnold is the Schnader Professor of Commercial Law Emeritus at the University of Pennsylvania, Secretary, UNCITRAL, and Chief, U.N. International Trade Law Branch, 1969-1974, a member of the Convention committee and a drafter of the CISG. This tongue-and-cheek comment alludes to the complexity created by computer-based contracts because they are paperless and virtually instant.

²¹ *Id.* at ix.

²² PURCHASING L. REP. (INST. OF MGMT. & ADMIN.) Jan. 1, 2002, available at 2002 WL 8843789.

²³ See Carl Pacini et al., *To Agree or Not to Agree: Legal Issues in Online Contracting*, BUS. HORIZONS, Jan. 1, 2002, at 43, available at 2002 WL 15800311.

²⁴ Pace Law School Institute of International Commercial Law, *Guide to Article 13: Comparison with Principles of European Contract Law* (2002), at <http://www.cisg.law.pace.edu/cisg/text/peclcomp13.html> (last visited Jan. 31, 2004).

²⁵ CISG, *supra* note 18, art. 13. Article 13 has comparatively little commentary devoted to it. It also has only 8 cases on record, half of which have not been adjudicated on an Article 13 issue. See discussion *infra* Parts III and IV.

²⁶ CISG, *supra* note 18, art. 13.

²⁷ *Id.*

²⁸ “Article 13. . . does not explicitly deal with the modern means of communication that have been introduced after 1980 and are nowadays frequently used in connection with the conclusion and performance of international sales contracts. . . .” Ulrich G. Schroeter, *Interpretation of “Writing”*:

contracting methods that international commercial parties bound by this Convention currently rely on to facilitate their transactions.²⁹

¶17 This article examines Article 13's origination, placement, and interpretation in light of modern business practices to argue that, although the CISG does not explicitly recognize electronic contracting methods in its definition of a *writing*, they are acceptable by virtue of the convention's intent, purpose, and support from other articles.³⁰ This article also examines new international and domestic legislation, underscoring the importance of the electronic contracting gap in international commercial sales. These efforts to usher in new legislation accommodating electronic contracts are evidence not only of Article 13's expansive definition to mature with international commercial practices, but also of the necessity to *fix* the electronic contracting gap for legal frameworks to keep pace with the changing times.³¹

¶18 To this end, Part I examines problems caused by electronic contracts in the CISG. Part II presents the history, scope, and application of the CISG. Part III discusses the origination and application of Article 13. Part IV evaluates how Article 13 and the CISG comport with modern interpretations of a *writing* to naturally include electronic contracts. Although this article establishes that electronic contracts are acceptable under the CISG, Part V identifies recent international and domestic legislation that also validates Article 13's expansive definition and offers additional ways for the CISG to *accept* electronic contracts.

I. PROBLEMS POSED BY ELECTRONIC CONTRACTS UNDER THE CISG

¶19 Sales transactions are about promises—particularly in a global context where different cultural, social, political, and legal institutions often make them difficult to keep.³² Contract law is a predictable enabler of international sales transactions because it provides certainty for the interpretation of promises, agreements, and their enforcement.³³ As a result, the CISG may be seen as an “important attempt to bridge the gap between . . . regional efforts and the global market as a whole.”³⁴ Part I thus examines problems with computer-based contracts under Article 13 because they are not in traditional paper form—laying the foundation to explain the Convention's intent to gap-fill electronic contracts.

Comparison between provisions of CISG (Article 13) and counterpart provisions of the Principles of European Contract Law (Pace Law School Institute of International Commercial Law Jul. 2002), at <http://www.cisg.law.pace.edu/cisg/text/peclcomp13.html#er> (last modified Nov. 21, 2002).

²⁹ “This poses the question if, and under which conditions, modern means of communication can be considered to fulfill writing requirements for the purposes of the CISG.” Schroeter, *supra* note 28, at 269.

³⁰ See *infra* Part IV.

³¹ See Lee, *supra* note 13, at 1281-84 (arguing that old laws must be updated to account for new technology).

³² See JAN RAMBERG, INTERNATIONAL COMMERCIAL TRANSACTIONS 17 (2nd ed., Kluwer Law International 2000); see also Helena Haapio & Anita Smith, *Safe Sales in Cyberspace* (American Corporate Counsel Association Jul. 2000) at <http://www.acca.com/reprints/safesales.html> (last visited Jan. 29, 2004); CISG, *supra* note 18, at pmb1.

³³ Philip M. Nichols, *Electronic Uncertainty Within the International Trade Regime*, 15 AM. U. INT'L L. REV. 1379, 1393 (1999-2000).

³⁴ James J. Callaghan, *U.N. Convention on Contracts for the International Sale of Goods: Examining the Gap-Filling Role of CISG in Two French Decisions*, 14 J.L. & COM. 183, 184-85 (1995).

A. Challenges Posed by Electronic Contracts

¶10 Electronic contracting involves two major problematic issues: speed and automation.³⁵ “Electronic communication occupies a functional position somewhere between the traditional letter and telephone communications.”³⁶ Face-to-face interaction is non-existent, though some interactions are more direct than others.³⁷ Just as quickly as one submits an offer or acceptance, this information may be instantaneously transmitted to the other party.³⁸ Errors are often difficult to catch and harder to rectify, particularly if one party has relied on the contract.³⁹ Electronic agents, mini-computer programs that automate tasks for the user, further complicate matters by contracting without human intervention.⁴⁰ An example of an electronic agent is found on any Internet retail site: when a customer places an order, the agent accepts instantaneously and confirms the order.⁴¹ While technology makes business quicker and easier to transact, part of this speed comes from a lack of formal interaction with paper contracts. As a result, the certainty and predictability of remedies afforded by a *tangible* contract are complicated by electronic measures. Consequently, international legal frameworks must adapt to establish the same certainty and predictability for electronic contracts as paper contracts.

1. Conducting Business Electronically

¶11 The CISG exists in the face of two important business phenomena: the sale of intangible goods⁴² (such as software) and intangible methods of transacting business, such as fax, EDI, the Internet, e-mail, telex, and online software agreements.⁴³ These phenomena fall generally under the moniker of electronic commerce.⁴⁴

³⁵ These features increase the risk of mistake and the addressee’s reliance on it before correction. Christina Hultmark Ramberg, *The E-commerce Directive and Formation of Contract in a Comparative Perspective*, 1 GLOBAL JURIST, Iss. 2, art. 3 (2001) at <http://www.bepress.com/gj/advances/vol1/iss2/art3> (last visited Jan. 26, 2004).

³⁶ Siegfried Eiselen, *Electronic Commerce and the UN Convention on Contracts for the International Sale of Goods (CISG) 1980*, 6 EDI L. REV. 21, 22 (1999), available at <http://www.cisg.law.pace.edu/cisg/biblio/eiselen1.html> (last visited Jan. 31, 2004).

³⁷ *Id.*

³⁸ GRALLA, *supra* note 7, at 8-10.

³⁹ See Eaglesham, *supra* note 1.

⁴⁰ Electronic agents are programs, invisible to the user, that automatically perform a task for the user. They are often referred to as “spiders,” “robots”, or “bots” in the Internet environment. Agents can perform tasks such as news retrieval, web maintenance, or completing a website purchaser’s shopping transaction. GRALLA, *supra* note 7, at 205-07; see also *Amazon.com*, *supra* note 11, at 1347.

⁴¹ See *infra* Part I.A.2.c-d. An automated e-mail is also commonly sent to the purchaser in addition to the on-screen confirmation of the order: an electronic receipt.

⁴² This concept does not include monetary instruments, which are excluded from the CISG.

⁴³ The telephone is specifically excluded because it proxies an oral contract, beyond the scope of electronic contracts. See Eiselen, *supra* note 36, at 21. “Unlike goods, information is an intangible commodity that, although it may be recorded in tangible form, can be possessed or used by an unlimited number of people.” Daniel K. Winters, *Courts Struggle with the Application of Contract Law to Internet Transactions: When Software is Purchased Online, and No One is There to See It, Did the Parties Enter a Contract?*, N.J.L.J. (American Lawyer Media Inc., New York, N.Y.) Aug. 19, 2002, at 1, available at http://www.pbnlaw.com/PressRoom/ecommerce_0802.pdf (last visited Jan. 31, 2004).

⁴⁴ See Eiselen, *supra* note 36, at 21.

¶12 These new concepts create vast business improvements. As new markets are more easily opened to a wider variety of players,⁴⁵ transactions become cheaper, and communication costs are reduced.⁴⁶ Simultaneously, businesses find complex contracting challenges by entering jurisdictions in which they had no intention of conducting business.⁴⁷ Parties have greater concerns with Internet contracting as opposed to traditional paper contracting because the law stops at country borders, while the Internet allows business to freely cross them.⁴⁸ However, computer-based contracts, particularly those created via the Internet, do not exist in a lawless cyberspace.⁴⁹ Governments are challenging fundamental legal concepts, such as contracts, to develop flexible frameworks to protect traditional contract law while recognizing and expanding it to include technology's borderless capabilities and maintain integrity for all legal players (judges, lawyers, legislators, and business people).⁵⁰ "The first step toward laying a legal foundation for electronic commerce is to clear away the barriers to electronic commerce, and the first and most obvious barrier is found in laws that require paper."⁵¹

¶13 Modern business and legal infrastructures revolve around paper technology, which presents a challenge to conducting business in today's information economy.⁵² The unique nature of electronic contracts creates tremendous uncertainty in international legal and business environments because the law is slow to respond to new technology.⁵³ The application of existing law to computer-based commerce is often inadequate.⁵⁴

2. Contract Formation: Offer, Acceptance and Consideration

¶14 Electronic commerce ("E-commerce") presents a multitude of challenges to traditional paper-based contract law, including: jurisdiction, validity, formation,

⁴⁵ See generally GRALLA, *supra* note 6, at 2. "In electronic communications there is this gap in time and space, but the gap in time is much smaller than is the case with traditional post. . . ." Eiselen, *supra* note 36, at 22.

⁴⁶ Jeffrey B. Ritter & Judith Y. Gliniecki, *International Electronic Commerce and Administrative Law: The Need for Harmonized National Reforms*, 6 HARV. J.L. & TECH. 263, 263 (1993) (arguing that the proliferation of non-paper based transactions requires regulatory reform to facilitate electronic commerce in a "media neutral" environment).

⁴⁷ Damian Sturzaker, *Australia: Dispute Resolution in the New Millennium: International Arbitration*, MONDAQ BUS. BRIEFING, Jul. 27, 2001, available at 2001 WL 8987177. Jurisdiction is also an issue because an electronic agreement "is not executed in any particular place." Poggi, *supra* note 13, at 225.

⁴⁸ "The Internet is no longer a self-enclosed club with no connection to the outside world. It has become intimately tied to the way live and work. . . becoming a part of our daily lives." GRALLA, *supra* note 7, at 244.

⁴⁹ Michael Joachim Bonell, *Do We Need a Global Commercial Code?*, 106 DICK. L. REV. 87, 94 n.30 (2001); see also Nichols, *supra* note 32 (explaining certainty as a prerequisite for commerce in a formal legal system).

⁵⁰ See generally Poggi, *supra* note 14, at 226.

⁵¹ Patricia Brumfield Fry, *Introduction to the Uniform Electronic Transactions Act: Principles, Policies and Provisions*, 37 IDAHO L. REV. 237, 242 (2001); see also Ritter & Gliniecki, *supra* note 46, at 263.

⁵² See generally Nichols, *supra* note 33, at 1390-91; see also Ritter & Gliniecki, *supra* note 46, at 263.

⁵³ Randy V. Sabett, *International Harmonization in Electronic Commerce and Electronic Data Interchange: A Proposed First Step Toward Signing on the Digital Dotted Line*, 46 AM. U. L. REV. 511, 513 (1996) (arguing that law's ability to change with electronic commerce's rapid growth remains in doubt).

⁵⁴ "Technology presents an almost infinite number of ways for parties to exchange and notify each other of terms and conditions. However, the true challenge is obtaining unequivocal assent to those terms and conditions." Winters, *supra* note 43, at 3.

modifications, authentication, message integrity, and non-repudiation.⁵⁵ This comment does not explore each challenge in detail. Instead, it evaluates contract formation concerns within four electronic media. The fundamentals of contract creation—offer, acceptance, and consideration—come under attack in electronic contract formation in the initial agreement and in modification.⁵⁶ Ultimately, the “take-it-or-leave-it” nature of electronic contracts, where the agreement is accepted as unread or by acquiescence, poses the greatest challenge to predictability and certainty in sales.⁵⁷

a. Electronic Mail (“E-Mail”)

¶15 E-mail, a method of sending an electronic message from one person to another using the Internet, is a convenient method of time-delayed direct communication.⁵⁸ While an e-mail may be a singular message, it also possesses the ability to form contracts.⁵⁹ Consequently, e-mail is viewed as both a formal and informal communications medium.⁶⁰ “[B]usiness people often regard informal e-mail arrangements and business correspondence as non-contractual events.”⁶¹ However, courts have found telegrams “with typed signatures, letterhead and/or logos [to] provide the ‘signature’ necessary for a binding contract.”⁶² Therefore, sending an e-mail, with or without a *signature line*,⁶³ including a name and pertinent contact information, may symbolize assent to contract formation.⁶⁴

¶16 If a court concludes that the sender “intended to acknowledge contents of documents,” then he or she will be bound by the terms.⁶⁵ In contrast, “receipt” in an electronic environment “does not require that the recipient know of, open, or read the message. All it requires is that the electronic message be available for processing by the

⁵⁵ See generally PURCHASING L. REP., *supra* note 22.

⁵⁶ Commercial parties are not likely to enter into contracts unless there is certainty it will be enforced in courts. Nichols, *supra* note 33, at 1390-94.

⁵⁷ See Dennis M. Kennedy, *Key Legal Concerns in E-Commerce: The Law Comes to the New Frontier*, 18 T.M. COOLEY L. REV. 17, 25 (2001) (arguing that most contracts presented online or in software are presented on a “take-it-or-leave-it” basis and accepted unread).

⁵⁸ GRALLA, *supra* note 7, at 78-87 (describing in technical detail how e-mail works).

⁵⁹ See Coyle & Wetzel, *supra* note 17. “[B]usiness transactions involving significant sums of money” occur via email.

⁶⁰ *Id.*

⁶¹ See Haapio & Smith, *supra* note 32 (arguing that an *informal* information attitude can lead to trouble as documents “develop into legally binding contracts”).

⁶² See Coyle & Wetzel, *supra* note 17, at 18 (col. 1) (citing e.g., Hillstrom v. Gosnay, 614 P.2d 466 (Mont. 1980)).

⁶³ An example of a signature line at the end of an email is the following:

Jennifer E. Hill
 JD/MBA Candidate, 2004
 Northwestern School of Law/Kellogg School of Management
 emailaddress@emailaddress.com

⁶⁴ See Coyle & Wetzel, *supra* note 17 (citing Shattuk v. Klotzbach, No. 011109A, slip op. at 7-8 (Mass. Dec. 11, 2001) (holding that an e-mail signature indicates an intentional act to which a party can be bound), available at 2001 WL 1839720). See also Discussion re E-Sign *infra* Part V.B.

⁶⁵ *Id.* E-mails are also entered into the federal rules of evidence. FED. R. EVID. 1001 (“Writings’ . . . consist of letters, words, or numbers, or their equivalent set down by . . . electronic recording, or other form of data compilation.”); FED. R. EVID. 901(a)(authentication), FED. R. EVID. 904(b)(4) (distinctive characteristics of authentication). Authentication is a problem with digital signatures. See discussion *infra* Part V.

recipient's information system."^{66, 67} An important and humorous example of the power of electronic signatures via e-mail comes from President Bill Clinton, remarking on the United States enactment of E-SIGN (The Electronic Signatures in Global and National Commerce Act): "If this [e-mail] had existed 224 years ago, the Founding Fathers wouldn't have had to come all the way to Philadelphia on July 4th for the Declaration of Independence. They could have e-mailed their 'John Hancock's' in."⁶⁸

b. Electronic Data Interchange (EDI)

¶17 EDI is the computer-to-computer transmission of information used by frequently contracting commercial parties to send and receive standard forms—generally purchase orders and invoices—in a store and forward message system.⁶⁹ It is, perhaps, the clearest example of electronic contracting through the use of an electronic agent. Parties agree on the standardized terms of the transaction.⁷⁰ Transactions—quotes and automatic responses to them—are sent and received daily via a phone line between electronic agents, devoid of human involvement.⁷¹ EDI reduces the time and complexity associated with sending and receiving large volumes of information, reducing keystroke errors.⁷² Purchase orders are one of the most common uses of EDI.⁷³ For example: Wal-Mart, a large retailer, uses EDI to repeatedly order large quantities of consumer goods, such as laundry detergent, for its thousands of stores. EDI enables the ordering and invoicing of these goods between computer systems. Contract offer, acceptance, and assent occur automatically.⁷⁴

¶18 EDI is a tricky method of electronic contracting because the output is in a specific technical format. Messages are coded in generally acceptable national or international forms and transmitted through a store and forward system. Since parties must agree on the standards and forms before they engage in the lengthy and expensive process of establishing direct communication, contract assent is evidenced by nature of the connections. Transaction efficiency through rapid electronic contracting has gained

⁶⁶ See Coyle & Wetzel, *supra* note 17, at 18 (col.1).

⁶⁷ With default signature lines in greater use to personalize electronic communication, perhaps senders should consider removing them to avoid any unnecessary liability or change them to reflect the non-binding nature of the communication.

⁶⁸ See Coyle & Wetzel, *supra* note 17. See Discussion re E-Sign *infra* Part V. President Clinton's tongue-in-cheek representation of today's communication media humorously embodies an often lengthy pursuit to validate a document, which may now be completed instantaneously. See generally *infra* Part V.

⁶⁹ PHYLLIS K. SOKOL, FROM EDI TO ELECTRONIC COMMERCE 14-22 (Marjorie Spencer ed., 1995). "[EDI] is the *intercompany computer-to-computer* communication of *standard business transactions* in a *standard format* that permits the receiver to perform the intended transaction." *Id.* at 14.

⁷⁰ *Id.* at 16.

⁷¹ *Id.* at 15.

⁷² William R. Denny, *Electronic Contracting in Delaware: The E-Sign Act and the Uniform Electronic Transactions Act*, 4 DEL. L. REV. 33, 34 (2001). Generally, large companies can only afford EDI due to proprietary networks which must be created to support it. See also SOKOL, *supra* note 69, at 5, 23. EDI reduces the five to ten percent key-entry error rate and the subsequent ten-fold costs to correct it. Other benefits include faster information exchange, quicker order-to-payment cycle, and improved trade partner relationships. EDI has improved the efficiency of communication for many industries that order large quantities of stock-keeping-units (SKUs), such as food and drug retailers. Savings as early as the 1970s were estimated at US\$170 million. *Id.* at 161.

⁷³ For an example regarding purchase orders, see SOKOL, *supra* note 69, at 5, 23.

⁷⁴ *Id.* at 16.

EDI's instantaneous communication methods international approval with the development of EDIFACT (EDI for Administration, Commerce and Transport), an international EDI standard.⁷⁵

c. The Internet

¶19 The Internet is a massive collection of networks cooperating to connect millions of computers globally to pass information to each other.⁷⁶ The Internet is used for a variety of purposes including communication, file sharing, information posting, and the purchase and sale of goods and services.⁷⁷ In the United States, the nation responsible for more than forty percent of all on-line spending, e-commerce grew more than nineteen percent to US\$32 billion in 2001.⁷⁸ Europe, the second fastest growing on-line community, was projected to spend US\$86 billion in 2002.⁷⁹ As a result, Internet-based sales are quickly becoming commonplace transactions. Internet sales are divided into three categories: B2B, business-to-consumer ("B2C"), and peer-to-peer ("P2P").⁸⁰

¶20 To understand a basic example of how a sale transacts over the Internet, let's examine a popular Internet retailer: Amazon.com. This online company sells thousands of products such as books, compact disks, and electronics—a familiar example of B2C sales.⁸¹ Customers choose products from the Amazon.com website, place them in a virtual shopping basket and provide credit card information to complete the purchase.⁸² When a customer clicks the "Place Your Order" button, he or she contractually agrees to the purchase.⁸³ The goods are mailed to the customer's designated address.⁸⁴ There is no physical signature and no paper changes hands, which is the major concern for identification and authentication.⁸⁵

¶21 B2B commerce functions similarly with publicly available or privately protected special websites prepared for valued customers, including direct billing and other

⁷⁵ *Id.* at 43-44, 239. American and European automotive companies, as the heaviest EDI users, mainly developed the EDIFACT standard, drawing on standardized trade documents created by the United Nations Economic Commission for Europe (UN/ECE) Committee on Development of Trade.

⁷⁶ GRALLA, *supra* note 7, at 5; Schroeter, *supra* note 28.

⁷⁷ GRALLA, *supra* note 7.

⁷⁸ Vigoroso, *supra* note 9.

⁷⁹ *Id.* Vigoroso distinguishes Eastern Europe, whose e-commerce growth is slower, from the fast-growing Western Europe on-line community. Vigoroso writes that Asia is the fastest growing online community.

⁸⁰ See Kennedy, *supra* note 57, at 18. *B2B* and *B2C* are becoming increasingly popular terminology to refer to electronic commerce based sales. *P2P* sales are not contemplated in this article because consumer transactions are excluded from the CISG. Auctions, another popular form of Internet sale for businesses and consumers, are also excluded for the same reason.

⁸¹ See Amazon.com, *supra* note 12.

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.* Purchasers may also designate a different address, such as when sending a gift.

⁸⁵ See generally Amazon.com, *supra* note 12, at 1347 (explaining how its virtual shopping cart operates). A common saying about anonymity problems online is: "[o]n the Internet, no one knows you're a dog!" This means that people often misrepresent themselves. In a commercial environment, this idiom translates into a specific concern for the CISG: "[n]o one knows whether the buyer is a consumer or a business." Amelia H. Boss, *Taking UCITA on the Road: What lessons have we learned*, UNIFORM COMPUTER INFORMATION TRANSACTIONS ACT: A BROAD PERSPECTIVE 2001, PLI Order No. G0-00WN (Oct. 17, 2001), WL 673 PAT/PLI 121, 153.

inventory management efficiencies. Similar to EDI, purchasing terms are generally agreed upon beforehand. Here, however, users manually interact with the website to select and purchase goods. Dell Computer Corporation is an excellent example of a business that creates customized websites for its top corporate customers to use for easy product selection, special pricing, and automatic invoicing.⁸⁶

d. Software Sales

¶22 Electronic contracting also occurs in software sales. Software is generally sold in four ways: 1) direct sale of a packaged or customized product, 2) license agreement, 3) subscription or database transaction, or 4) online sales, which results in the shipment of a software product or automatic download.⁸⁷ Two forms of electronic contracts dominate: “click-wrap” and “shrink-wrap” agreements.⁸⁸ Software sellers determine the contracting method.⁸⁹ Click-wrap agreements, also known as “browser-wrap” agreements, allow “a buyer to manifest assent to the terms of a contract by clicking on an acceptance button that appears while the buyer obtains or installs the product.”⁹⁰ A buyer cannot start using the software until he or she has clicked on the button accepting the terms and conditions of the agreement.⁹¹ Click-wrap agreements require buyer action in order to begin usage but do not guarantee cognizance of the agreement terms.⁹² Buyers can assent to the contract without even reading it in order to use the product.⁹³ Buyers cannot negotiate and must, therefore, accept the terms as-is. Most courts find these agreements enforceable.⁹⁴ Understandably, concern remains that click-wrap agreements may be accepted without users actually reading or understanding contract terms when manifesting assent.⁹⁵

⁸⁶ Dell Computer Corporation, an industry leader in “customized procurement portals,” who epitomizes the direct-to-order model that couples the operational benefits of just-in-time manufacturing with the personalization of one-to-one made to order products. *See* Dell, *Premier Tour*, at <http://premier.dell.com/premier/demo/index.html> (last visited Jan. 31, 2004); *see also* JAN W. RIVKIN & MICHAEL E. PORTER, MATCHING DELL, HARVARD BUSINESS CASE NO. 9-799-158 (Harvard Business School Publishing 1999).

⁸⁷ *See* Marcus G. Larson, Comment, *Applying Uniform Sales Law to International Software Transactions: The Use of the CISG, Its Shortcomings, and a Comparative Look at How the Proposed UCC Article 2B Would Remedy Them*, 5 TUL. J. INT’L & COMP. L. 445, 466 (1997).

⁸⁸ *Id.*

⁸⁹ *See* Winters, *supra* note 43, at 2.

⁹⁰ *Id.* at 3. *See* Ofoto.com, at <http://www.ofoto.com> (last visited Jan. 28, 2004) as an example of customers agreeing to use free software by reading a click-wrap agreement and clicking on an “I agree” statement in order to download the software.

⁹¹ Winters, *supra* note 42.

⁹² Customers “must” read the agreement before clicking the “I agree” button, but there are no mechanisms in place to ensure reading. *See* Haapio & Smith, *supra* note 32.

⁹³ Winters, *supra* note 42. *See generally* *i.Lan Systems v. NetScout Service Level Corp.*, 2002 U.S. Dist. LEXIS 209 at *1-2 (D. Mass., Jan. 2, 2002) (framing the challenge click-wrap agreements pose to traditional contract law because of the uncertainty around users reading the agreement before manifesting assent).

⁹⁴ Winters, *supra* note 42. *See also* *Specht v. Netscape Communications Corp.*, 150 F. Supp. 2d 585 (S.D.N.Y. 2001) (holding that users are bound if they affirm the click-wrap agreement because “notice of a license appears on the [seller’s] Web site” where users can easily find, read and assent to the “full text” of the agreement).

⁹⁵ Winters, *supra* note 42. *See also* *i.Lan Systems*, *supra* note 93. Click-wrap agreements are often inconspicuously placed, as there are no formal requirements for placement. *Balloon*, *supra* note 17, at 932.

¶23 Shrink-wrap agreements operate slightly differently. For example, they are used when one purchases off-the-shelf software.⁹⁶ The agreement is imprinted on the software box, CD-ROM case, or other materials included inside the package.⁹⁷ “The license begins when the purchaser reads its terms and tears open the cellophane wrapping or shrink-wrap that surrounds the package.”⁹⁸ Buyers are supposed to return the software package to the retailer if they elect not to abide by the agreement.⁹⁹ Courts are similarly concerned about buyers actually receiving notice of the sale, consciously agreeing to the sale, and conditioning the sale on acceptance of the license.¹⁰⁰

¶24 As demonstrated by the aforementioned electronic communications methods, technology offers many ways for parties to exchange information about terms and conditions when forming electronic contracts.¹⁰¹ However, the true challenge in the quest to balance ease of sale with legal protection for both the buyer and seller is “obtaining unequivocal assent to those terms and conditions.”¹⁰² Without acceptable rules and guidelines, commercial parties may be hesitant to embrace new technology, fearing unenforceable or invalid contracts.¹⁰³ These tensions currently face the primary convention on contracts for the international sale of goods—the CISG—which did not include electronic communications methods because they were not contemplated at the time of drafting.¹⁰⁴ Keeping electronic contract methods in mind, this article will now explore how the CISG, particularly Article 13, embraces the information age and paperless contracts.

II. THE UNITED NATIONS CONVENTION ON THE INTERNATIONAL SALE OF GOODS (“CISG”)

¶25 On January 1, 1988, the CISG came into effect through ratification by eleven countries.¹⁰⁵ The CISG is a United Nations-sponsored treaty regulating contracts for the international sale of goods, including formation, party obligations, rights and remedies for breach of contract.¹⁰⁶ Sixty-two nations have adopted the CISG as guiding legislation for international sales.¹⁰⁷ The CISG does not purport to answer every question that may

⁹⁶ *Off-the-shelf* software is industry terminology to describe software packages that can be physically purchased at a local store and installed by the user onto his or her computer.

⁹⁷ Winters, *supra* note 43. *See also* Larson, *supra* note 87, at 466.

⁹⁸ Winters, *supra* note 42.

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ *See supra* Part I.A.

¹⁰² Winters, *supra* note 42.

¹⁰³ Sabett, *supra* note 53, at 534; *see also* Ritter & Gliniecki, *supra* note 46, at 274.

¹⁰⁴ *See* Pace Law School Institute, *supra* note 24.

¹⁰⁵ CISG, *supra* note 18. Per Article 99(1), ten states must adhere to the Convention in order for its ascendance at the start of the year 1988. By December 11, 1986, instruments of adherence were deposited with the Secretary General of the United Nations by the following countries: Argentina, China, Egypt, France, Hungary, Italy, Lesotho, Syria, United States of America, Yugoslavia, and Zambia. *See* HONNOLD, *supra* note 20, at 3.

¹⁰⁶ Thomas J. Drago and Alan F. Zoccolillo, *Be Explicit: Drafting Choice of Law Clauses in International Sale of Goods*, May 2002, METRO. CORP. COUNS. 9, (col. 1), WL 5/02 METCC 9, (col. 1).

¹⁰⁷ *See CISG: Table of Contracting States*, at <http://www.cisg.law.pace.edu/cisg/countries/cntries.html> (last visited Jan. 26, 2004). The sixty-two ratifying nations (with dates of effectiveness) are: Argentina (Jan. 1, 1988), Australia (Apr. 1, 1989), Austria (Jan. 1, 1989), Belarus (Jan. 1, 1990), Belgium (Nov. 1,

arise in transactions involving the international sale of goods.¹⁰⁸ Instead, the Convention promotes “the adoption of uniform rules which govern contracts for the international sale of goods and take into account the different social, economic and legal systems [that] contribute to the removal of legal barriers in international trade and promote the development of international trade.”¹⁰⁹

A. History of the CISG

¶26 The drafting of the CISG began in the 1930s by European scholars, at the behest of the International Institute for the Unification of Private Law (UNIDROIT).¹¹⁰ By 1935, a preliminary draft of a uniform law for international sales was issued.¹¹¹ World War II interrupted drafting, and in 1956, twenty-one nations continued the project.¹¹² Revised drafts were sent to governments in 1956 and 1963 for evaluation.¹¹³ Meanwhile, a draft for a uniform law of contract formation began in 1958.¹¹⁴ The 1964 Hague Convention discussed both related drafts, resulting in two Conventions: the Uniform Law for the International Sale of Goods (ULIS) and the Uniform Law on the Formation of Contracts for the International Sale of Goods (ULF).¹¹⁵ Five states, mostly European, ratified these Conventions in 1972.¹¹⁶

¶27 In 1966, a General Assembly of the United Nation’s Resolution desired worldwide support of such Conventions to promote the harmonization of international trade law.¹¹⁷ Thus, the United Nations Commission on International Trade Law (UNCITRAL) was

1997), Bosnia-Herzegovina (Mar. 6, 1992), Bulgaria (Aug. 1, 1991), Burundi (Oct. 1, 1999), Canada (May 1, 1992), Chile (Mar. 1, 1991), China (PRC) (Jan. 1, 1988), Columbia (Aug. 1, 2002), Croatia (Oct. 8, 1991), Cuba (Dec. 1, 1995), Czech Republic (Jan. 1, 1993), Denmark (Mar. 1, 1990), Ecuador (Feb. 1, 1993), Egypt (Jan. 1, 1988), Estonia (Oct. 1, 1994), Finland (Jan. 1, 1989), France (Jan. 1, 1988), Georgia (Sept. 1, 1995), Germany (Jan. 1, 1991), Greece (Feb. 1, 1999), Guinea (Feb. 1, 1992), Honduras (Nov. 1, 2003), Hungary (Jan. 1, 1988), Iceland (Jun. 1, 2002), Iraq (Apr. 1, 1991), Israel (Feb. 1, 2003), Italy (Jan. 1, 1988), Kyrgystan (Jun. 1, 2000), Latvia (Aug. 1, 1998), Lesotho (Jan. 1, 1988), Lithuania (Feb. 1, 1996), Luxembourg (Feb. 1, 1998), Mauritania (Sep. 1, 2000), Mexico (Jan. 1, 1989), Moldova (Nov. 1, 1995), Mongolia (Jan. 1, 1999), Netherlands (Jan. 1, 1992), New Zealand (Oct. 1, 1995), Norway (Aug. 1, 1989), Peru (Apr. 1, 2000), Poland (Jun. 1, 1996), Romania (Jun. 1, 1992), Russian Federation (Sept. 1, 1991), Saint Vincent and the Grenadines (Oct. 1, 2001), Singapore (Mar. 1, 1996), Slovak Republic (Jan. 1, 1993), Slovenia (Jun. 25, 1991), Spain (Aug. 1, 1991), Sweden (Jan. 1, 1989), Switzerland (Mar. 1, 1991), Syria (Jan. 1, 1988), Uganda (Mar. 1, 1993), Ukraine (Feb. 1, 1991), United States (Jan. 1, 1988), Uruguay (Feb. 1, 2000), Uzbekistan (Dec. 1, 1997), Yugoslavia (Jan. 1, 1988), Zambia (Jan. 1, 1988). Declaring and reserving states are included within this list. *Id.*; see <http://www.unilex.info/dynasite.cfm?dssid=2376&dsmid=13351&x=1> (last visited Jan. 26, 2004).

¹⁰⁸ John P. McMahon, *Applying the CISG: Guides for Business Managers and Counsel*, at <http://www.cisg.law.pace.edu/cisg/guides.html> (revised Jan. 2004).

¹⁰⁹ CISG TREATY, *supra* note 18, at pmb1.

¹¹⁰ HONNOLD, *supra* note 20, at 5. *See also* CISG, *supra* note 17. *See also*, PETER SCHLECHTRIEM, UNIFORM SALES LAW—THE UN CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS 17-20 (Manzche Verlags 1986), available at <http://www.cisg.law.pace.edu/cisg/biblio/schlechtriem.html> (last visited Jan. 26, 2004).

¹¹¹ HONNOLD, *supra* note 109.

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.* at 6.

¹¹⁷ *Id.* at 6.

born, holding its first session in 1968.¹¹⁸ Because UNCITRAL felt that both Conventions would not achieve worldwide acceptance due to countries' legal, economic and political differences,¹¹⁹ the Conventions were revised by fourteen States.¹²⁰ By 1978, the updated Conventions, the ULIS and ULF, were combined into one document: the CISG.¹²¹ It received unanimous approval¹²² and represented "the equality and mutual benefit [that] is an important element in promoting friendly relations among the States."¹²³

B. Scope and Application

¶28

The CISG is a self-executing treaty¹²⁴ divided into three distinct parts: Part I explains the sphere of application and general provisions, Part II describes contract formation, and Part III provides substantive rules for contracting.¹²⁵ The Convention grants a "buyer and seller. . . [a] reasonable certainty as to their respective legal rules and obligations."¹²⁶ It encompasses the international sale of commercial goods for business purposes only, not including accompanying services, consumer goods, or products procured through auction.¹²⁷ It also excludes goods comprising material parts necessary for manufacture or production, including labor services.¹²⁸ Personal injury liability arising from goods is also excluded from the Convention.¹²⁹ The Convention only concerns the "formation of the contract of sale and the rights and obligations of the seller and buyer arising from such a contract."¹³⁰ It does not regulate contract validity or property in

¹¹⁸ *Id.* at 6. Membership was initially set at 29 States and later enlarged to 36 States to represent all regions of the world. G.A. Res. 3108, UNCITRAL, V Yearbook, at 10-12 (Dec. 12, 1973).

¹¹⁹ *Explanatory Note by the UNCITRAL Secretariat on the United Nations Convention on Contracts for the International Sale of Goods*, U.N. Doc. V.89-53886 (1989), available at <http://www.cisg.law.pace.edu/cisg/text/p23.html> (last visited Jan. 29, 2004).

¹²⁰ HONNOLD, *supra* note 20, at 9. The Convention underwent three stages before it reached finality: (1) the UNCITRAL Working Group (1970-77), (2) Review by the full Conference (1977-78), and (3) The Diplomatic Conference (1980). JOHN O. HONNOLD, DOCUMENTARY HISTORY OF THE UNIFORM LAW FOR INTERNATIONAL SALES: THE STUDIES, DELIBERATIONS AND DECISIONS THAT LED TO THE 1980 UNITED NATIONS CONVENTION WITH INTRODUCTIONS AND EXPLANATIONS 2 (Kluwer 1989).

¹²¹ HONNOLD, *supra* note 20, at 9-10.

¹²² HONNOLD, *supra* note 20, at 10-11 (Under the rules of the conference, each article was approved by a two-thirds majority. The two articles not passing underwent compromised revision, whose new versions were "approved without dissent." The CISG's text was finalized in six different languages—Arabic, Chinese, English, French, Russian, and Spanish.).

¹²³ CISG, *supra* note 18, at pmbl.

¹²⁴ FRANCO FERRARI, THE SPHERE OF APPLICATION OF THE VIENNA SALES CONVENTION 4-5 (Kluwer Law International 1995). See also Karen B. Giannuzzi, *The Convention on Contracts for the International Sale of Goods: Temporarily Out of "Service"?*, 28 LAW & POL'Y INT'L BUS. 991, 992 n.8 (1997) ("A self-executing treaty requires no further action by a legislative body in order to effectuate its transformation into domestic law.")

¹²⁵ See CISG, *supra* note 18, at Points 2 and 3.

¹²⁶ *Don't Let CISG's Differences From UCC Trip Up Your International Supplier Agreements*, PURCHASING L. REP., Dec. 1, 2001, available at 2001 WL 24141770.

¹²⁷ CISG, *supra* note 18, at art. 2. Article 2 additionally excludes goods for personal use, family use or household goods—unless the seller was unaware of this fact before contracting, goods prohibited by law, "stocks, shares, investment securities, negotiable instruments of money," and "ships, vessels, hovercraft or aircraft. . . [and] electricity." *Id.*

¹²⁸ CISG, *supra* note 18, at art. 3.

¹²⁹ CISG, *supra* note 18, at art. 5.

¹³⁰ CISG, *supra* note 18, at art. 4.

goods sold.¹³¹ The Convention is further limited to international sales and, therefore, does not encompass domestic transactions.¹³²

¶29 Transacting parties must be from different contracting states who have adopted the CISG, in order for the convention to apply to the contract.¹³³ Alternatively, the CISG may be applied when a state has domestically incorporated the rules of the CISG.¹³⁴ As an example of the former situation, a seller of ceramic tiles from Italy contracting with a buyer from Australia would have the CISG apply to their transaction because the contract is for the international sale of goods (the Italian ceramic tiles) and both contracting states have adopted the CISG.¹³⁵ As an example of the latter situation, if a South African buyer (non-contracting state) purchased goods from an Austrian seller (contracting state), the CISG would apply because Austrian law has adopted the CISG as part of domestic law.¹³⁶ The nature of the CISG enables it to have a neutralizing effect on domestic laws, which puts both the buyer and seller from different States on equal footing, enabling transparent decisions and accountability through equal legal principles.¹³⁷ “At a minimum, the CISG provides a common language for the international business community to rely upon in negotiating and structuring transactions.”¹³⁸

¶30 Parties, however, have a right to contract around the CISG’s default rules by choosing the application of domestic law, the forum’s private international law rules, or particular sections therein.¹³⁹ Such terms may be expressly accepted or rejected as long as domestic law validity requirements are met.¹⁴⁰ Parties may also opt-in to the CISG when their transaction falls outside the Convention’s scope.¹⁴¹ Furthermore, parties can also refer to the CISG in their transactions by *lex mercatoria* (customs and practices governing commercial law developed through time by merchants).¹⁴² However, if parties

¹³¹ *Id.*

¹³² Domestic transactions were excluded from the CISG scope in order to achieve universal adoption. HONNOLD, *supra* note 20, at 2-3.

¹³³ CISG, *supra* note 18, at art. 1(1).

¹³⁴ *Id.*; see also Drago & Zocolillo, *supra* note 106.

¹³⁵ CISG, *supra* note 18, at art. 1. However, if parties appear “to have their places of business in the same State,” but one party uses an agent from an undisclosed foreign principle, the CISG would not apply. *Id.*

¹³⁶ Eiselen, *supra* note 36, at 21. Not all domestic states agreeing to this combination have reserved to Article 95. If, for example, the South African company had contracted with the United States, the CISG would not apply because the United States reserved to its application within the private rules of international law. Article 95 reads: “[a]ny State may declare at the time of the deposit of the instrument of ratification, acceptance, approval or accession that it will not be bound by subparagraph (1)(b) of Article 1 of this Convention.” CISG, *supra* note 18, at art. 95. Article (1)(b) reads, “[w]hen the rules of private international law lead to the application of the law of a Contracting State.” CISG, *supra* note 18, at art. 1(1)(b).

¹³⁷ Giannuzzi, *supra* note 124, at 1011 n.91.

¹³⁸ *Id.* at 1034 (CISG may be viewed as international default rules by contracting states, unless specifically contracting around them.).

¹³⁹ CISG, *supra* note 18, at art. 6, 12, 96. For methods of treaty acceptance, see *id.* at art. 91 and 100. See also SCHLECHTRIEM, *supra* note 110, at 24.

¹⁴⁰ SCHLECHTRIEM, *supra* note 110, at 24 (domestic law does not mean that local sales laws apply, nor does it mean that the Convention “bypasses” domestic law). See also RAMBERG, *supra* note 32, at 26-27.

¹⁴¹ Larson, *supra* note 87, at 452; see also FERRARI, *supra* note 123, at 36.

¹⁴² See Louis F. Del Duca & Patrick Del Duca, *Selected Topics Under the Convention on International Sale of Goods*, 106 DICK. L. REV. 205, 207 (2001); see also Monica Kilian, *CISG and the Problem with Common Law Jurisdictions*, 10 J. TRANSNAT’L L. & POL’Y 217, 224 (2001) (“CISG has gained the status of *lex mercatoria*, at least in arbitral proceedings.”). See also RAMBERG, *supra* note 32, at 20-21 (*Lex*

want to ensure that the CISG does not apply to their transaction, an explicit opt-out clause should be inserted in the international sales contract, favoring a choice of law provision instead of or in place of the CISG.¹⁴³

¶31 The importance of the CISG has been established not only by the great efforts taken by the United Nations to transform three uniform sales conventions on contracts for the international sale of goods into one, but also from the sheer number of states who have ratified it.¹⁴⁴ Against these conditions, Article 13's limited definition of a contract *writing* is illuminated.

III. CISG ARTICLE 13

¶32 Article 13 states: "For the purposes of this Convention 'writing' includes telegram and telex."¹⁴⁵ Accordingly, Article 13 was written prior to computer-based contracting becoming *en vogue*.¹⁴⁶ To understand how Article 13 functions within the CISG, Part III uncovers Article 13's drafting and legislative history to fully define terms and usage and to view its purpose and connection with other CISG articles.

A. Drafting Considerations

¶33 Though Article 13 defines a *writing*, it does not interpret declarations or statements made by transacting parties, either expressly or implicitly.¹⁴⁷ In fact, a contract does not have to be "concluded or evidenced by writing" *at all*—the CISG has no form requirements.¹⁴⁸ Contract *writings* under the CISG may be proven by "any means, including witnesses."¹⁴⁹

¶34 Form requirements were purposely excluded from the CISG to give parties greater flexibility in contracting with each other and to account for oral agreements and modern means of communication.¹⁵⁰ This also avoids conflict with States' domestic form requirements, which are often stricter.¹⁵¹ If the CISG has no form requirements, then why does Article 13 exist at all? Article 13 was added to act as a supplementary definition to

mercatoria is an "a national system of principles and rules generally accepted in international commerce." An example of *lex mercatoria* is *pacta sunt servanda*, parties observing good faith in contractual relationships.)

¹⁴³ Drago & Zocolillo, *supra* note 106; see also Paul M. McIntosh, *Selected Legal Aspects of International Sales Transactions: The United Nations Convention on Contracts for the International Sale of Goods*, BUS. CREDIT, Oct. 1, 2001, at 36, available at 2001 WL 12570546.

¹⁴⁴ See CISG, *supra* note 106.

¹⁴⁵ CISG, *supra* note 18, at art. 13.

¹⁴⁶ See generally Eiselen, *supra* note 36; see also Schroeter, *supra* note 28.

¹⁴⁷ Schroeter, *supra* note 28. See also CISG, *supra* note 18, at art. 8. (Article 8 provides for interpretation).

¹⁴⁸ CISG, *supra* note 18, at art. 11.

¹⁴⁹ *Id.*

¹⁵⁰ See SCHLECHTRIEM, *supra* note 109, available at <http://www.cisg.law.pace.edu/cisg/biblio/schlechtriem-11.html> (last visited Jan. 29, 2004); see also Jacob S. Zeigel, *Report to the Uniform Law Conference of Canada on Convention on Contracts for the International Sale of Goods* (Jul. 1981) (freedom of form is also a tradition in civil law countries, such as those of Western Europe), available at <http://www.cisg.law.pace.edu/cisg/text/ziegel11.html> (last visited Jan. 29, 2004).

¹⁵¹ *Id.*; see also *infra* Parts IV-V (enabling domestic form requirements through reservation to CISG Articles 12 and 96).

two other articles on acceptance: Article 21(2) “letter or other writing containing a late acceptance,” and Article 29(2) “a contract in writing which contains a provision requiring any modification or termination by agreement to be in writing. . .”¹⁵² Article 13’s purpose was to emphasize that telex and telegram are acceptable methods of contract modification,¹⁵³ even though the CISG does not have form requirements.¹⁵⁴ Article 13 was included to ensure that telex and telegram are media that will *always* satisfy a writing requirement because they are explicitly mentioned.¹⁵⁵ Telex and telegram were singled out at the time of drafting (late 1970s) as suitable methods to facilitate communication speed.¹⁵⁶ Contract modifications often necessitate quick decisions; telex and telegram were two newly available methods to do so.

¶35 Article 13 also links to the proper acceptance of an offer, as described in Article 20.¹⁵⁷ Here, Article 13’s mention of telex and telegram make two salient points in Article 20. First, a telegram equates to a letter to convey that the period of time for acceptance begins from the moment the telegram is handed in for dispatch, the letter sent, or if no date is listed, the date on the envelope.¹⁵⁸ Second, telex compares to the telephone or “other means of instantaneous communication,” which fixes the acceptance period starting from the time the offer reaches the offeree.¹⁵⁹ Article 13’s specific inclusion of these two *writing* media—telex and telegram—is thus complemented by Article 20, which expounds on assent methods to accommodate new forms of communication.

B. Legislative History and Commentary

¶36 The legislative history of Article 13 also uncovers motivation behind the mention of only two distinctive forms of *writing*. The German delegates to the CISG Working Group specifically suggested including telex and telegram to give reserving States who have a domestic writing requirement the option of using these methods for the “conclusion, rescission, or modification” of a contract.¹⁶⁰ Dr. Peter Schlechtriem, a

¹⁵² CISG, *supra* note 18, at Arts. 21(2), 29(2); *see also* HONNOLD, *supra* note 20, at 141.

¹⁵³ Schroeter, *supra* note 28, at 46; *see also* HONNOLD, *supra* note 20, at 141.

¹⁵⁴ CISG, *supra* note 17, at art. 11; *see also*, HONNOLD, *supra* note 19, at 135 (CISG does not formally require a *writing* for a contract because the Convention does not contemplate the Statute of Frauds. Since the CISG aims to avoid interference with domestic regulations, Article 11 was written to avoid writing requirement problems, yet enable parties to contract around them by invoking Article 6, or reserving to Article 11 altogether. While Article 11 does not prohibit the imposition of a formal requirement, it “removes any impediment to enforcement between parties based on any domestic ‘requirement as to form’”). *See also* SCHLECHTRIEM, *supra* note 109, at 46-47 (However, if parties invoke the Article 96 reservation, then higher domestic form requirements might apply).

¹⁵⁵ CISG, *supra* note 17, at art. 11. The term *writing* is only mentioned twice in the articles and it only requires it for Article 29(2) modifications. *See generally* CISG, *supra* note 18, at art. 13 and 29(2); *see generally* SCHLECHTRIEM, *supra* note 110.

¹⁵⁶ SCHLECHTRIEM, *supra* note 110, at 46. An excellent online resource to Article 13’s legislative history is Pace Law School Institute of International Commercial Law, *Legislative History 1980 Vienna Diplomatic Conference*, available at <http://www.cisg.law.pace.edu/cisg/chronology/chrono13.html> (last updated Sept. 5, 2000).

¹⁵⁷ CISG, *supra* note 18, at art. 20.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.* Acceptance is considered once the telegram is “handed in for dispatch” or from the date shown on the envelope or letter. It is considered an instantaneous form “from the moment the offer reaches the offeree.”

¹⁶⁰ CISG, *supra* note 18, at art. 20; *see also* SCHROETER, *supra* note 28.

notable international law scholar, concludes that telegram and telex were probably included in the final draft of Article 13 because it was drafted on a model provision in the UNCITRAL Convention on the Limitation Period of 1974 (Article 1(3)(g)), which *required* form.¹⁶¹ Thus, including telex and telegram would enhance form clarity in contract modifications that require quick decisions.¹⁶² Further legislative history reveals that CISG Article 13 is comparable to UNIDROIT principles as its definition of a *writing*: “. . . any mode of communication that preserves a record of the information contained therein and is capable of being reproduced in tangible form.”¹⁶³ The comparable relationship concludes that Article 13 was intended to achieve a uniform objective standard for form requirements, so that parties need not comply with domestic requirements that could pose a higher standard and become difficult to verify.¹⁶⁴

¶37 It should also be noted that Article 13 had no direct predecessor in the ULF, ULIS or any previous Convention drafts.¹⁶⁵ Such little legislative history is unsurprising, given the minimal debate it received in conference meetings and plenary sessions.¹⁶⁶ Article 13 was quickly adopted, with forty-two affirmative votes and three abstentions.¹⁶⁷

IV. ELECTRONIC CONTRACTING UNDER ARTICLE 13

¶38 Because the CISG specifically excludes mention of electronic contracting, a question is left unanswered: are electronic contracts valid in international commercial sales?¹⁶⁸ If the CISG is outdated, States would violate this treaty by forming electronic contracts via e-mail, EDI, or the Internet. Part IV thus evaluates electronic contracting under Article 13 to reveal that it is an organically acceptable method of international commercial contractual agreement, uniquely worded by the drafters to contemplate future commercial communications improvements. Part IV also explores other CISG articles to establish electronic contracting acceptability.

A. Article 13 is Outdated, but Naturally Updateable

One obvious instance of a provision that was outdated from the moment the CISG came in to force is Article 13. It mentions the telex—nobody uses a telex anymore—but it doesn't mention the fax or other recently

¹⁶¹ SCHLECHTRIEM, *supra* note 110, at 46 n.145 (*citing* U.N. Doc. A/Conf. 97/C.1/SR.7 at 10 § 73) (listing construction contracts as an example of time-sensitive contracts).

¹⁶² *See* discussion *infra* Part IV.A.

¹⁶³ *Use of the UNIDROIT Principles to help interpret CISG Article 13* (*citing* INTERNATIONAL INSTITUTE FOR THE UNIFICATION OF PRIVATE LAW, UNIDROIT PRINCIPLES OF INTERNATIONAL COMMERCIAL CONTRACTS, art. 1.10 (1994)), at <http://www.cisg.law.pace.edu/cisg/principles/uni13.html> (last visited Jan. 27, 2004). For example, Article 20(1) requires a written acknowledgment for the interruption of the limitations period. *See also infra* note 198.

¹⁶⁴ *See generally supra* note 161.

¹⁶⁵ That Article 13 has no predecessor is further evidence of the lack of technical standards in international business transactions in the 1980s. Schroeter, *supra* note 28 at 270.

¹⁶⁶ U.N. Convention on Contracts for the International Sale of Goods, 33rd meeting, Apr. 2, 1980, U.N. Doc. A/Conf.97/C.1/SR.33 (on file with author); *see* HONNOLD, *supra* note 120, at 645.

¹⁶⁷ UNCITRAL, 6th Plenary Meeting, U.N. Doc.A/Conf.97/SR.6/Doc C(7) (Apr. 8, 1980) (on file with author); *see* HONNOLD, *supra* note 120, at 740.

¹⁶⁸ *See* Schroeter, *supra* note 28.

developed means of communication. That, I think, is an example of how quickly a Convention or a civil code can become outdated.¹⁶⁹

¶39 Article 13, indeed, fails to reflect important features of modern day business practices. However, this does not mean that Article 13 and the entire CISG is “a statutory piece of legislation [that has] largely petrified the law.”¹⁷⁰ Consequently, this section examines the intent and purpose of the CISG to demonstrate that it naturally extends its boundaries for a *writing* to include issues not conceived by the drafters.¹⁷¹

1. The outer limits of *writing* requirements

¶40 As noted in Part III *supra*, Article 11, defining form, does not impose any official writing requirements, which reinforces Article 13’s flexibility.¹⁷² This means that even oral contracts—in person or via telephone—are valid under the CISG.¹⁷³ The lack of writing requirements creates benefits within the CISG. For example, it facilitates confidence in oral agreements, such as telephone sales orders which are evidenced by a purchase order number.¹⁷⁴ Facsimile and telex status, widespread commercial methods of contracting or modification, also need not be questioned.¹⁷⁵ Lastly, writing requirements often interfere with the “necessary speed of commercial transactions.”¹⁷⁶ Therefore, excluding formal writing requirements facilitates international trade—the very purpose of the CISG.¹⁷⁷

¶41 The term *writing*, however, is not intended to fix the term’s outer limits.¹⁷⁸ Modern business communication and contracting methods include a multitude of electronic media: e-mail, EDI, and the Internet, which are not rooted in paper form.¹⁷⁹ However, they are the ideal contracting tools because they enable distant parties to collaborate, negotiate and communicate more easily, reducing the time and effort involved.¹⁸⁰ It could be argued, therefore, that by virtue of the outer limits interpretation, electronic

¹⁶⁹ Harry M. Flechtner, *Transcript of a Workshop on the Sales Convention: Leading CISG Scholars Discuss Contract Formation, Validity, Excuse for Hardship, Avoidance, Nachfrist, Contract Interpretation, Parol Evidence, Analogical Application, and Much More*, 18 J. L. & COM 191, 218 (1999) (quoting Prof. Schlechtriem).

¹⁷⁰ Eiselen, *supra* note 36, at 21.

¹⁷¹ Fletchner, *supra* note 169, at 220 (quoting Prof. Schlechtriem).

¹⁷² See discussion *supra* Part III.A. A contract does not have to be “concluded in or evidenced by writing and is not subject to any other requirement as to form.” CISG, *supra* note 18, at art. 11. The principle of form allows contracting parties to declare form requirements. SCHLECHTRIEM, *supra* note 110, at 46. Potential areas include: Articles 26, 29(2), 39(1), 43(1), 47(1), 65(1), 72(2), 81(1), 92; Schroeter, *supra* note 28, at 269.

¹⁷³ See generally, HONNOLD, *supra* note 20, at 141.

¹⁷⁴ R.M. Lavers, *CISG: To Use or Not to Use?*, 21 INT’L BUS. LAWYER 13 (Jan. 1993).

¹⁷⁵ *Id.*

¹⁷⁶ Alejandro M. Garro, *Reconciliation of Legal Traditions in the U.N. Convention on Contracts for the International Sale of Goods*, 23 INT’L LAW. 443, 448 (1989), available at <http://www.cisg.law.pace.edu/cisg/text/garro11.12.html> (last visited Jan. 26, 2004).

¹⁷⁷ If contracting methods were really an issue, the drafters would have included them.

¹⁷⁸ Fletchner, *supra* note 169, at 220 (quoting Prof. Schlechtriem).

¹⁷⁹ See discussion *supra* Part I.A.

¹⁸⁰ See also Kidd & Daughtrey, *supra* note 6, at 217 (arguing that tasks once requiring weeks of preparation and delivery and dozens of workers can be accomplished “in minutes by one person using the Internet”); see generally Poggi, *supra* note 14, at 250.

communication would not pose a more serious problem to the CISG than either telex or telegram. Although the medium for the contract is changing, the business principles behind the transaction are not.¹⁸¹ Yet electronic contracts become questionable because they do not exist in a *formal* paper-based medium known to traditional contracts.¹⁸² The key concern with new electronic contract forms is a readable record—whether parties have the ability to create or retain a copy of the contract.¹⁸³ However, these concerns are resolvable because agreements formed by e-mail, EDI or over the Internet may be stored and printed as evidence, if required.¹⁸⁴ This makes them as enforceable as other agreements.¹⁸⁵

¶42 Article 11's effect on Article 13 also leads to two additional implications: (1) a *writing* does not require a signature or any other "validating mark or sign,"¹⁸⁶ and (2) a contract may be valid in a non-publishable form. Examining each implication in turn, the following conclusions result. The signature on a contract is a critical part of authentication and non-repudiation.¹⁸⁷ Under Article 6, parties may not require a signature.¹⁸⁸ If no signature is required, no gap exists with telex or telegram to satisfy a signature requirement.¹⁸⁹ If parties require a signature, the aforementioned methods would still satisfy this contractual requirement because parties can easily sign or affix a signature mark.

¶43 Let us use the facsimile (fax) as an example to test the readability principle under Article 13. The fax is a modern communication method relative to the ratification of the CISG (1980).¹⁹⁰ Therefore, it serves as an excellent proxy to understand how Article 13 extends to new forms of electronic contracts. Communication by fax in Europe was

¹⁸¹ "Electronic commercial practice does not require changing the principles on which business is conducted. It merely changes the medium." Poggi, *supra* note 13, at 267.

¹⁸² "Electronic commerce is fundamentally altering business practice by replacing traditional paper-based methods of moving information with direct computer-to-computer communications." Ritter & Gliniecki, *supra* note 46, at 263.

¹⁸³ Schroeter, *supra* note 28. "Electronic means of communication fulfill the writing requirement if they lead to printed and material text which the parties can put into their files, submit to their superiors, to government boards or tax authorities. Most importantly, it can serve as evidence which is as reliable as telegram or telex." SCHLECHTRIEM, *supra* note 110.

¹⁸⁴ *Id.* E-mail is acceptable to the U.S. Federal Rules of Evidence. FED. R. EVID. 1001. Another less supported view of Article 13 exists because of this writing issue: that its purpose was to achieve a "uniform objective standard for requirements" so that parties did not have to take efforts to comply with domestic requirements, which could be stricter. In essence, Article 13 could be viewed as a "stop-gap" which enumerates more specific satisfactory methods of a "writing" to achieve compliance. However, the awkward wording of Article 13, coupled with the intent and purpose of the drafters to establish a flexible tool for international business, leads one to disregard this contention.

¹⁸⁵ Kidd & Daughtrey, *supra* note 7, at 222; see discussion *infra* Part V (for examples of international and domestic legislation that have created legal framework to put electronic and paper contracts on equal footing).

¹⁸⁶ Kidd & Daughtrey, *supra* note 7, at 222.

¹⁸⁷ See generally Balloon, *supra* note 17.

¹⁸⁸ CISG, *supra* note 18, art. 6.

¹⁸⁹ See Switzerland HG 45/1994 Commercial Court St. Gallen, Switzerland, 53-54 (Dec. 5, 1995) (holding that a buyer's unsigned fax order for equipment was a contract with the seller because a CISG contract "is not subject to any requirement as to form" and the buyer's intentions were clear), available at <http://www.cisg.law.pace.edu/cases/951205s1.html> (last visited Jan. 31, 2004).

¹⁹⁰ See Schroeter *supra* note 28.

virtually unheard of at the time of drafting and, therefore, not mentioned.¹⁹¹ Since fax was an unknown medium, an internal gap existed.¹⁹² Article 7(2) provides for gap-filling “according to the general principles on which the Convention is based” or those of private international law.¹⁹³ Fax possesses the ability to result in traditional written form: a recordable and printable document. A fax creates a printable copy to send through a fax machine, which the receiver views in printed form when it transmits through his or her machine. Faxes sent electronically are equally readable because the document, though sent electronically, may be printed just as easily.¹⁹⁴ Lastly, fax satisfies the drafters’ intent to provide for modification measures that enable a quick decision on a contract, such as are inherent to telex and telegram. Therefore, including fax as a rapid method of initial agreement is similarly consistent with the drafters’ intent to facilitate commercial transactions.¹⁹⁵

¶44

Although Article 13 precedent is sparse, two Article 13 cases have been decided on the fax issue.¹⁹⁶ In 1993, the Austrian Supreme Court decided that fax is an acceptable method to update a domestic lease in a dispute over whether the lessor had legitimately received notice of lessee’s lease updates.¹⁹⁷ The Court specifically stated that “a message sent by telefax should be considered valid” under Article 13 principles.¹⁹⁸ In 1999, a Russian commercial arbitration similarly held that contract modifications are “effective” if sent by fax.¹⁹⁹ Parties may “exchang[e] documents by mail, telegraph, teletype, electronic or other means of communication, which allow credible verification that the document is sent by the party to the contract.”²⁰⁰

¹⁹¹ See HONNOLD, *supra* note 20, at 141. Most of the CISG drafting was accomplished in Europe. The Convention draws on both common and civil law principles. The lack of a writing requirement reflects European legal principles, which have operated for centuries without such a rule. Lavers, *supra* note 174, at 13.

¹⁹² “It is clear that in the case of electronic communications there is only reference to telex and none of the other forms of communication with the result that the existence of a gap can be assumed.” Eiselen, *supra* note 36, at 28.

¹⁹³ CISG, *supra*, note 18, at art. 7(2). It reads: “Questions concerning matters governed by this Convention which are not expressly settled in it are to be settled in conformity with the general principles on which it is based, or in the absence of such principles, in conformity with the law applicable by virtue of the rules of private international law.” See also *supra* Part III.B.3 for additional information on the gap-filling provision.

¹⁹⁴ “This condition is certainly fulfilled if the fax is stored on the recipient’s computer system, [even if] the fax message merely appears on the recipient’s screen and he chooses not to print it out.” Schroeter, *supra* note 27; see generally Efax.com, at <http://www.efax.com> (last accessed Jan. 31, 2004) (Efax.com is a web-based fax services provider, offering email access to faxes sent to a user through a traditional fax machine via a phone line or the Internet. Users access their email to view (and print) the fax.).

¹⁹⁵ See *supra* Part III.A.; see also Schroeter, *supra* note 27.

¹⁹⁶ Of the over 1000 cases listed in the UNCITRAL database, eight concern Article 13. Although not all are translated, only three address Article 13 issues directly. Others merely list Article 13 as a supplementary definition. The UNCITRAL database is the most comprehensive listing of CISG cases. CISG Case Database, <http://www.cisg.law.pace.edu/cisg/text/e-text-13.html> (last accessed Jan. 31, 2004). Unfortunately, the database does not contain an exhaustive list because many CISG disputes are settled in arbitration, which are not always published. Lavers, *supra* note 174, at 13.

¹⁹⁷ SZ 1/525-93 (OGH Jul. 2, 1993), available at UNILEX.COM, <http://www.unilex.info> (last visited Jan. 29, 2004).

¹⁹⁸ *Id.*

¹⁹⁹ Russia 6 October 1999 Arbitration proceeding 55/1998 (on file with author).

²⁰⁰ *Id.*

¶45 Therefore, a fax *is* considered a *writing* under Article 13 and satisfies Articles 21(2) and 29(2) modifications. With fax established as an acceptable form of an Article 13 *writing*, let's examine how other electronic media follow suit.

2. Article 13 Applies to Electronic Contracts

¶46 If the drafters included telex and telegram to account for the often quick decision needed to modify a contract, then including rapid methods of initial agreement are consistent with the drafters' intent.²⁰¹

¶47 EDI, the computer-to-computer automatic transmission of standard forms, falls within Article 13's scope because contracts are initially required to develop the technical connections necessary to facilitate EDI.²⁰² Parties agree beforehand on the types of documents and technical standards they will send to each other, enabling the automatic exchange of information.²⁰³ These prior arrangements are evidence of parties' intent to contract.²⁰⁴ The "store and forward" EDI function, which collects messages from the sender and sends them to the mailbox of the recipient, allows for readability and printing, if desired.²⁰⁵ Principles of European Contract Law ("PECL") also support the acceptance of EDI under Article 13 interpretation. CISG Article 13 has been compared to PECL 1:301(6), which makes no explicit mention of EDI, but encompasses any "means of communication capable of providing a readable record of the statement of both sides."²⁰⁶ "[E]lectronic developments such as FAX and EDI do not present more serious problems of verification than 'telegram and telex' and should be assimilated to the definition of 'writing' in Article 13."²⁰⁷

¶48 E-mail functions in a comparable manner to fax because e-mail can result in a printable record.²⁰⁸ Although messages and attachments, such as contracts, are sent between recipients electronically, messages are stored in the systems of both the sender and recipient.²⁰⁹ These messages are easily accessed and printed. Therefore, e-mail

²⁰¹ See also THE UNCITRAL THESAURUS, A/CN.9/SER.C/GUIDE/1 Eng. Sept. 12, 1995, at <http://www.cisg.law.pace.edu/cisg/text/cisgthes.html#13> (last visited Jan. 26, 2004) (stating that under Article 13 its terms apply to the writing requirement in arts. 21(2) and 29(2), and that "[e]lectronic communications similar to telex and telegram" are acceptable writings).

²⁰² See discussion *supra* Part I.A.2.b.

²⁰³ *Id.*; Schroeter, *supra* note 28, Part 4.2.

²⁰⁴ Schroeter, *supra* note 28 (citing Eiselen, *supra* note 36).

²⁰⁵ See generally SOKOL, *supra* note 69, at 14-22.

²⁰⁶ Schroeter, *supra* note 27 (citing COMMISSION ON EUROPEAN CONTRACT LAW, PRINCIPLES OF EUROPEAN CONTRACT LAW (PECL), Article 1:301(6) (Ole Lando and Hugh Beale, Eds. complete and revised version 1999)). PECL 1:301(6) is often comparable to CISG Article 13 because it provides similar terms for writing and does not include document interpretation. Although the PECL was written almost 20 years after the CISG, its text was drawn from many European sources, including the CISG, and specifically meant to be more expansive than Article 13 itself.

²⁰⁷ Schroeter, *supra* note 27. Telegram and telex were probably accepted as methods to fulfill the writing requirement "without further debate" because it was drafted from the UNCITRAL Convention on the Limitation Period of 1974 (Article (1)(g)(3)). In addition, UNCITRAL established a Working Group to deal with exactly this problem—electronic signatures. Its efforts resulted in the UNCITRAL Model Law on Electronic Commerce. See discussion *infra* Part V.A.

²⁰⁸ E-mail has a similar store and forward system to EDI. GRALLA, *supra* note 7, at 78-84. The main difference is the open standards between the parties, because messages may be sent to practically any network without prior arrangement. See discussion *supra* Part I.A.b, Part IV.A.1.

²⁰⁹ GRALLA, *supra* note 7, at 78-85.

fulfills the Article 13 standard for *writing* as a standard format and for Article 21(2) and 29(2) modifications. Signature issues are irrelevant because form is not required under the CISG.²¹⁰ If parties choose to require a signature, a *signature line*²¹¹ or other mark may be included to satisfy this requirement.

¶49 Internet-based agreements, such as those executed via click-wrap,²¹² are also valid. Click-wrap agreements enable a party to interact with the document by pushing a button to affirm the contract of sale.²¹³ Parties have similar capabilities for printing out and recording a copy of the click-wrap document. Parties who agree to web-based sales contracts in a commercial context almost certainly have pre-arranged terms of the transaction, similar to EDI,²¹⁴ and have established this method as a custom.²¹⁵

3. The CISG's *Texture* and Capacity to Respond to New Changes

¶50 Laws that may be readily amended (e.g. income tax laws and regulations) may indulge in detail, but this is “not feasible for laws that must endure.”²¹⁶ Domestic laws on obligations and sales have stood for almost a century and many are even older. International legislative machinery is even harder to put in motion.²¹⁷ Consequently, the CISG must be read and applied in a manner that permits it to grow and adapt to novel circumstances and changing times.²¹⁸

¶51 The CISG is purposefully a flexible, expanding document—to meet the strengths and challenges of international business, continuously promoting equitable international trade.²¹⁹ Decades of drafters’ work would be eradicated if new methods of electronic communication were excluded. “The key legal mechanism to ensure safe sales in [B2B] transactions is the contract.”²²⁰ Contracts help parties to reach their goals, avoid disputes, and set expectations for resolving disputes if one arises.²²¹ Because the Convention was drafted for international business people “with no special knowledge of international business law” and not lawyers, modern electronic contracting methods suit the scope and intent of the CISG. The CISG was meant to act as a neutral choice of law to help parties concentrate on transacting business instead of battling over jurisdiction.²²² Furthermore, the text of the treaty does not indicate that the Convention was intended “to exclude any specific kind of communication.”²²³ This assumption holds because electronic

²¹⁰ See *supra* Part IV.A and note 154.

²¹¹ See *supra* Part I.A.2.a and note 63.

²¹² See discussion *supra* Part I.A.2.c.

²¹³ *Id.*

²¹⁴ See discussion *supra* Part I.A.2.b.

²¹⁵ CISG, *supra* note 18, at art. 9(2). As long as a usage is well-known and “regularly observed by parties to contracts” in international trade, a usage “may become part of the contract not only if the parties knew about it but also if they *ought to have known* about its existence.” RAMBERG, *supra* note 32, at 19.

²¹⁶ HONNOLD, *supra* note 20, at 16.

²¹⁷ *Id.*

²¹⁸ *Id.*

²¹⁹ See CISG, *supra* note 18, at pmb1.

²²⁰ See Haapio & Smith, *supra* note 31; see Coyle & Wetzel, *supra* note 17; see generally Ritter & Gliniecki, *supra* note 46, at 264.

²²¹ See CISG, *supra* note 18, at pmb1.; see generally Ritter & Gliniecki, *supra* note 46, at 264-67.

²²² See CISG, *supra* note 18, at pmb1.; see Lavers, *supra* note 174, at 10 (arguing that businesses often fear “parochial” tendencies of local courts).

²²³ Eiselen, *supra* note 36, at 28; see *infra* Part III.

contracting methods were “largely non-existent” when the treaty was ratified.²²⁴ Conceivably, the drafters would have been more explicit with exclusions for a *writing* had they intended any.²²⁵

¶52 Perhaps the most revealing element of the drafters’ intent for a growing definition of a contract *writing* is the actual language used in Article 13: “. . . ’writing’ *includes* telegram and telex.”²²⁶ Use of the word *includes* indicates a non-terminating list of acceptable forms of writing: more than just the *lex mercatoria*, or customary, paper contract form. A different interpretation yields similar results: *includes* specifies that the two ensuing listed methods (telegram and telex), representative of *modern* electronic communications for 1980, are suitable forms of contract writing.²²⁷ Had CISG drafters enumerated acceptable contracting methods instead, a fixed interpretation of a contract *writing* would have been created.²²⁸ Dutch drafters actually proposed contract form enumeration for Article 11.²²⁹ However, their proposal was rejected because specific enumeration and inflexibility of terms is inconsistent with the overall purpose, intent and text of the CISG. The lack of fixed terms in the CISG points toward a *writing* definition that evolves with international business. Hence, use of the term *includes* ensures that modern communication methods for commercial contracting will not be excluded.²³⁰

¶53 Two additional assumptions support a liberal interpretation of Article 13. First, Article 6 enables contracting parties to “derogate from or vary the effect of any of its provisions.”²³¹ Second, the Vienna Convention specifies that when deviations occur they should not be contrary to the intent and purpose of the treaty.²³² Therefore, States possess the ability to specify that a contract must be in electronic form, such as EDI, under the CISG.²³³ Parties could similarly require that contracts be formed via paper writing, which still would not invalidate the permissibility of electronic methods under Article 13. Thus, when interpreting Article 13, the freedom of formality and freedom of contract principles

²²⁴ Eiselen, *supra* note 35, at 28.

²²⁵ Other international legal scholars agree that Article 13 does not have an “exhaustive” definition of *writing*. Jacob S. Ziegel, *Report to the Uniform Conference of Canada on Convention on Contracts for the International Sale of Goods*, at <http://www.cisg.law.pace.edu/cisg/text/ziegel13.html> (last visited Jan. 26, 2004) (a Canadian interpretation says that Article 13 is to be “liberally conformably [sic] to modern means of communication.”). Similarly, a Spanish interpretation advises that Article 13 does not seem to indicate that it should remain static in the face of new sophisticated methods of communication. New technology relates to improved communication methods for geographically distant parties, such that an improvement of transactional abilities would fall within the intent of the Convention. Prof. M^a del Pilar Perales Viscasillas, *El Contrato de Compraventa Internacional de Mercancías (Convención de Viena de 1980)*, § 147, at <http://www.cisg.law.pace.edu/cisg/biblio/perales1-13.html> (last visited Jan. 26, 2004).

²²⁶ CISG, *supra* note 18, at art. 13 (emphasis added).

²²⁷ Professor M^a del Pilar Perales Viscasillas, *supra* note 225, available at <http://www.cisg.law.pace.edu/cisg/biblio/perales1-11.html> (last visited Jan. 26, 2004) (arguing that Article 11’s lack of form requirement gives the parties the flexibility of using electronic means of communication to create contracts).

²²⁸ In addition, a Convention article used by two-thirds of nations’ involved in world trade would be outdated. See discussion *supra* Part IV.A, note 169.

²²⁹ SCHLECHTRIEM, *supra* note 110, at 44.

²³⁰ Eiselen, *supra* note 36, at n.43 (quoting Prof. Honnold).

²³¹ CISG, *supra* note 18, at art. 6.

²³² Vienna Convention on the Law of Treaties, May 23, 1969, art. 31(1), 8 I.L.M. 679. The Vienna Convention is the “treaty of treaties,” which concerns the obligations of States to each other.

²³³ See discussion *supra* Part II.A.2.b.

imply an “inclusive interpretation” that accepts any of the aforementioned electronic contracting methods when a *writing* is required.²³⁴

B. *Additional CISG Articles Support an Expansive Definition of Writing*

¶54 Article 13’s affirmation of electronic contracting is also supported by other Convention articles. The articles’ connections magnify the drafters’ original intent to promote growing international trade, encourage active contracting, and harmoniously co-exist with states’ domestic laws.²³⁵

1. Article 20(1)

¶55 Article 20’s provision for fixed acceptance periods also specifies how telegrams, letters, telexes, telephones or “other means of instantaneous communication” are handled.²³⁶ The acceptance period for telegrams and letters begins at the point when it is handed in to dispatch, or from the date shown on the letter or envelope, depending on which is available.²³⁷ An acceptance via a phone call, telex, or other instantaneous measure begins when the offer reaches the offeree.²³⁸ The important distinction drawn from Article 20 supporting Article 13 is the combination of media in each specific fixed acceptance period. Telegrams are included with letters as non-instantaneous means of communication, whereas telex, phone calls, and other means are instantaneous. Because e-mail, EDI, and the Internet provide instantaneous means of communication, their acceptance periods are also fixed when the communication reaches the recipient under Article 20.²³⁹ If these measures satisfy Article 20 criteria precisely in the same manner as the cited methods, then they should be viable options for creating a contract under Articles 11 and 13.²⁴⁰

2. Articles 12 and 96

¶56 Articles 12 and 96 also support a liberal interpretation of Article 13. Combined, they permit a State to exclude Article 11, which stipulates freedom of contract form, by substituting its own domestic laws on writing.²⁴¹ Article 96 stipulates that States reserve the option of declaring that Article 11’s lack of freedom of form does not apply “where any party has his place of business in that State.”²⁴² States invoking this reservation could dictate writing requirements, which must be agreed upon by both contracting parties,

²³⁴ Eiselen, *supra* note 36, at 36.

²³⁵ See generally CISG, *supra* note 18, at pmb1.

²³⁶ CISG, *supra* note 18, at art. 20(1); see also discussion *supra* Part III.A.

²³⁷ CISG, *supra* note 17, at art. 20(1).

²³⁸ *Id.*

²³⁹ See generally, Eiselen, *supra* note 36, at 30.

²⁴⁰ Recall that Article 13 was also included in the Convention to facilitate the quick modification of contracts. See *supra* Part III.

²⁴¹ CISG, *supra* note 18, at art. 12, 96; Eiselen, *supra* note 36. States may exclude the Convention altogether if they contract for this upfront and if the parties’ domestic sales law is the “same or closely related.” CISG, *supra* note 18, at art. 94; see also, SCHLECHTRIEM, *supra* note 110, at 112.

²⁴² CISG, *supra* note 17, at art. 96.

though States need not have reserved in order to impose a writing requirement.²⁴³ However, Article 6 allows for variance of CISG provisions, as long as they do not act contrary to the intent of the treaty.²⁴⁴ To this end, parties may choose to impose an electronic contracting requirement just as easily as a paper requirement. One of the key reasons Article 11 allows freedom of form is not to bias modification methods in favor of one party.²⁴⁵

3. Article 7

¶57 The “observance of good faith in international trade” and gap-filling requirement embodied by Article 7 is perhaps the most compelling support of Article 13’s natural extension to include electronic contracting methods within its definition of *writing*. The CISG’s principles are expected to endure and to “embrace the gamut of transactions and conditions that will arise in a diverse and developing international economy.”²⁴⁶ Because the CISG was created to facilitate commerce across a variety of political, legal and socio-economic systems, thus requiring a different level of detail than domestic legislation, frequent changes by legislative adjustment are unrealistic.²⁴⁷ Article 7 recognizes that uniform international law is difficult to achieve, must be interpreted “with sensitive regard for its special character and purpose,” and is meant to “adapt and grow in light of new circumstances.”²⁴⁸

¶58 Article 7(1) asserts that the Convention should be interpreted “to promote uniformity” and “the observance of good faith in international trade.”²⁴⁹ Good faith applied in the CISG is not a general requirement but an interpretation principle²⁵⁰ that holds a reasonableness standard to those acceptable in trade.²⁵¹ Article 9 advances this standard by establishing that parties give notice regarding trade customs or usages widely known in international trade so they can apply to contracts and their formation.²⁵²

²⁴³ *Id.*

²⁴⁴ *Id.* at art. 6.

²⁴⁵ SCHLECHTRIEM, *supra* note 110, at 45, available at <http://www.cisg.law.pace.edu/cisg/biblio/schlechtriem-11.html> (last visited Jan. 26, 2004).

²⁴⁶ HONNOLD, *supra* note 20, at 104.

²⁴⁷ See RAMBERG *supra* note 32. The CISG took more than a decade to draft and, arguably, could take just as long to change.

²⁴⁸ HONNOLD, *supra* note 20, § 85, at 88. Article 7 reads:

“(1) In the interpretation of this Convention, regard is to be had to its international character and to the need to promote uniformity in its application and the observance of good faith in international trade. (2) Questions concerning matters governed by this Convention which are not expressly settled in it are to be settled in conformity with the general principles on which it is based or, in the absence of such principles, in conformity with the law applicable by virtue of the rules of private international law.” *Id.*

²⁴⁹ CISG, *supra* note 18, at art. 7(1).

²⁵⁰ HONNOLD, *supra* note 20, § 94 at 100. “Good faith” has varying interpretations worldwide. For example, the U.C.C. requires good faith “in its performance of enforcement” of “every contract or duty within this Act.” See U.C.C. § 1-201(19). Similarly, German Civil Code (§ 242) states: “The debtor is bound to effect performance according to the requirements of good faith, giving consideration to common usage.” *Id.*

²⁵¹ HONNOLD, *supra* note 20, § 95 at 101. For a more detailed understanding of good faith in the CISG, see Carolina Saif, *A Study of the Interplay Between the Conventions Governing International Contracts of Sale*, at <http://www.cisg.law.pace.edu/cisg/text/saf7.html> (last visited Jan. 26, 2004).

²⁵² *Id.*; CISG, *supra* note 18, at art. 9. Article 9 reads:

(1) The parties are bound by any usage to which they have agreed and by any practices which they have established between themselves. (2) The parties are considered, unless otherwise agreed, to have impliedly

International business customs and usages are always evolving; therefore, the “terrain” to which the CISG is applied will change, along with CISG interpretations. Electronic commerce is “transform[ing] how international trade participants (including governments) conduct business;” thus, electronic contracting is an international business custom.²⁵³ It does not “alter the substance of business contracts so much as it alters the process of agreement.”²⁵⁴ Therefore, a narrow construction of the CISG would make it inapplicable to grounds it once covered and affect its future applicability and longevity.²⁵⁵

¶59 Article 13 of the Vienna Convention also lends support to an expansive interpretation of a *writing* in Article 13. It proclaims that a treaty is supposed to be interpreted within the “ordinary” meaning of its own terms “in their context and in the light of its object and purpose.”²⁵⁶ A Convention that creates obligations between States for contracting in international sales is naturally subject to its purview.

¶60 The necessary complement to the good faith inclusion is the “gap-filling” measure provided for in Article 7(2), which governs matters “not expressly settled” in the CISG.²⁵⁷ Such matters must be developed from the general principles of the Convention, or by “virtue of the rules of private international law” if general principles are absent.²⁵⁸ Thus, matters governed by the Convention, such as formation or writings, turn to the Convention itself to provide meaning and solutions or look to private international law to resolve discrepancies.²⁵⁹

¶61 Combined, the two paragraphs of Article 7 convey that general CISG principles should be applied to new situations, as it would have been difficult and extraneous to the purpose of a uniform code to anticipate every detailed scenario. Article 13’s *writing* definition would, therefore, naturally include electronic forms of contracting because to do so is consistent with the purpose of the Convention and falls neatly within the gap-filling provision of Article 7. Furthermore, Article 13 lies within Part II (General Provisions) of the CISG, which specifically lends itself to a broader interpretation.²⁶⁰

made applicable to their contract or its formation a usage of which the parties knew or ought to have known and which in international trade is widely known to, and regularly observed by, parties to contracts of the type involved in the particular trade concerned.

See also RAMSBURG, *supra* note 215; SCHLECHTRIEM, *supra* note 110, at 40-41.

²⁵³ See generally, Ritter & Gliniecki, *supra* note 46, at 264-66; *but cf.* Kidd & Daughtrey, *supra* note 7, at 218 (arguing that “[f]ew companies are likely to rely on old ways of doing business.”).

²⁵⁴ Kidd & Daughtrey, *supra* note 7, at 222.

²⁵⁵ See Giannuzzi, *supra* note 123.

²⁵⁶ Vienna Convention on the Law of Treaties, *supra* note 232; see also, HONNOLD, *supra* note 20, § 90 at 93.

²⁵⁷ CISG, *supra* note 18, at art. 7(2).

²⁵⁸ *Id.*

²⁵⁹ HONNOLD, *supra* note 20, § 96 at 103. The drafters rejected domestic law as the method to fill gaps because of the varying nature, confusion, and disagreement which would arise from differing domestic legal frameworks and interpretations. Since the goal of the CISG is to promote the uniformity of international trade principles while considering “different social, economic and legal systems,” looking first toward domestic law would frustrate this purpose. CISG, *supra* note 18, at pmb1.

²⁶⁰ HONNOLD, *supra* note 20, § 103.1 at 113. The CISG does not advocate strict construction; the closest approximation to strict construction exists in Articles 1-5, establishing international sales transactions that are included and excluded.

4. The Special Case for “Shrink-Wrap” Agreements

¶162 Shrink-wrap agreements are a form of electronic contracting which could pose a challenge to automatic inclusion under Article 13. Shrink-wrap agreements are affirmed by silence or inaction because the user does not have to take any active measure to demonstrate acceptance.²⁶¹ The CISG expressly prohibits acceptance by silence or inactivity, per Article 18.²⁶² However, a solution to this problem exists within the CISG. If the Buyer and Seller agree to transact business this way—through a shrink-wrap agreement, their respective intent to contract is established.²⁶³ Since the Buyer needs to give his or her acceptance to this method of contracting, he or she takes an active part in assenting to the offer. Therefore, the exclusion of agreements by silence or inaction would not apply.²⁶⁴

¶163 In summary, Article 13’s articulation of two now outdated *writing* media does not result in the exclusion of electronic contracting. Article 13’s purpose and scope, supported by other articles, and the Convention’s intent to expand global trade through uniform contracting principles reveal that these new methods are organically acceptable.²⁶⁵ That the Convention has yet to be updated to reflect electronic forms of contracting is a testament to the uniformity and flexibility of the Convention to smoothly adapt to novel circumstances in changing times.

V. GLOBAL LEGISLATION ALSO *GAP-FILLS* THE ARTICLE 13 WRITING REQUIREMENT

¶164 This comment has argued that computer-based contracts are valid under the CISG. As a result, there is no call for change to the CISG. The intent of the Convention and Article 13 points to an inclusive interpretation of *writing*, which is supported by legislative history, case law, and *lex mercatoria*. However, an analysis of Article 13’s extension to electronic contracting would lack a thorough evaluation without viewing it in light of international and domestic legislation which has recently started to address the shift toward electronic commerce. Thus, Part V describes how such legislation fills the Article 13 *writing* gap and how parties might make the CISG subject to its purview. Section A presents the UNCITRAL Model Law on Electronic Commerce—the U.N. framework for States’ domestic electronic commerce legislation.²⁶⁶ Since the mid-1990’s, the e-commerce phenomenon has incited countries around the world to remove legal barriers to e-commerce.²⁶⁷ As an example of domestic efforts to give equal validity

²⁶¹ Larson, *supra* note 87, at 466.

²⁶² CISG, *supra* note 18, at art. 18(1). “Silence or inactivity does not in itself amount to acceptance.” *Id.* See also, Rob Schultz, Note, *Rolling Contract Formation Under the UN Convention on Contracts for the International Sale of Goods*, 35 CORNELL INT’L L. J. 263, 264 (2002).

²⁶³ See *supra* note 233. Assent through silent could have been an established business custom.

²⁶⁴ Sellers of shrink-wrapped contract necessitating goods, such as computer software, presumably choose the shrink-wrap form of contracting because it provides intellectual property protection and reduces the costs of doing business by not having to actively elicit the buyer’s assent. However, this kind of contract arrangement to grant a software license is often used at the consumer level, which is not covered by the CISG.

²⁶⁵ See discussion *supra* Part III, IV.

²⁶⁶ United Nations Commission on International Trade Law (UNCITRAL), UNCITRAL MODEL LAW ON ELECTRONIC COMMERCE (WITH GUIDE TO ENACTMENT), U.N. GAOR, 6th Comm., A/51/628 (1996) [hereinafter UNCITRAL MODEL LAW ON E-COMMERCE].

²⁶⁷ Poggi, *supra* note 14, at 237.

to electronic contracts, Section B examines the world's largest e-commerce player—the United States.²⁶⁸

A. *International: UNCITRAL Model Law on Electronic Commerce*

¶165 The U.N. Model Law on E-commerce originated to further progress and harmonize international trade by including electronic transactions within the scope of international contracts, to accommodate increasing usage.²⁶⁹ The Model Law identifies paper as the main obstacle for electronic commerce-based legislation, because of physical writing requirements.²⁷⁰ The Model Law ensures “legal security in the context of the widest possible use of automated data processing in international trade.”²⁷¹ However, the Model Law legitimizes electronic communications without disturbing international or domestic paper-based legislation.²⁷² Its articles apply to any kind of data message used in commercial activities.²⁷³ It directly addresses legal obstacles posed by terms, such as *writing*, *signed* (or *signature*), and *original*, to include electronic contracting.²⁷⁴ Overall, the UNCITRAL Model Law is perhaps the comprehensive answer to omitted parts of the CISG, such as Article 13, because it directly addresses *writing* issues to resolve contracting concerns, including offer, acceptance, consideration and modification.²⁷⁵

1. Main Components of the UNCITRAL Model Law

¶166 Specifically, the Model Law sets forth that electronic communication should not be denied legal effect “solely on the grounds that it is in the form of a data message.”²⁷⁶ Legal effect includes “due evidential right.”²⁷⁷ Instead of directly equating electronic documents to paper documents, the Model Law regards data messages as a “functional-equivalent,” by isolating “basic functions of paper-based form requirements” and

²⁶⁸ For a list of over 55 States' and their domestic legislation on e-commerce, see Baker & MacKenzie, *Global E-commerce Law: International Regulations & Legislation* (2003), at <http://www.bmck.com/ecommerce/intlegis.htm> (last visited Jan. 26, 2004). “By the mid-1990s, the explosion of electronic commerce over the Internet led almost every European nation and U.S. states’ legislatures to enact some sort of statute designed to remove legal impediments to electronic commerce.” Poggi, *supra* note 14, at 226.

²⁶⁹ See generally, UNCITRAL MODEL LAW ON E-COMMERCE, *supra* note 266, at pmbl., *Guide to Enactment*, chap. I.F.19. (“The decision to undertake the preparation of the Model Law was based on the recognition that, in practice, solutions to most of the legal difficulties raised by the use of modern means of communication as sought within contracts.”)

²⁷⁰ *Id.* at chap. I.E.15; see also Ritter & Gliniecki, *supra* note 45.

²⁷¹ UNCITRAL MODEL LAW ON E-COMMERCE, *supra* note 265, at pmbl. The provisions contained are minimum acceptance standards, but this does not insinuate that States should undertake stricter requirements themselves. *Id.* at *Guide to Enactment*, chap. I.F.21.

²⁷² *Id.* at *Guide to Enactment*, chap. I.E.15-16. Although the Model Law seeks to help States update their domestic legislation “without necessitating the wholesale removal of the paper-based requirements themselves or disturbing the legal concepts or approaches underlying those requirements.” *Id.*

²⁷³ *Id.* at art.1. However, States have the option of limiting this to international data messages.

²⁷⁴ *Id.* at *Guide to Enactment*, chap. I.A.3; see also Poggi, *supra* note 14, at 237.

²⁷⁵ See UNCITRAL MODEL LAW ON E-COMMERCE, *supra* note 265, at Part I, chap. 1 (General Provisions), chap. 2 (application of legal requirements in data messages), chap. 3 (communication of data messages).

²⁷⁶ *Id.* at art. 5.

²⁷⁷ *Id.* at art. 9(2).

explaining data messages to meet these requirements.²⁷⁸ Offer, acceptance, and any part of contract formation is acceptable “by means of data message.”²⁷⁹ Distinct from the CISG, *writing* is delineated to include data messages if the information can be accessed for subsequent reference.²⁸⁰ It specifies the validity of data messages used as electronic signatures, assuming the signer and his assent can be identified reliably.²⁸¹ Data message originality is also addressed to account for imagery and integrity.²⁸² Time and place of data message dispatch regulate offer and acceptance.²⁸³ Dispatch time is set at the time the sender loses control over the data message in the information system, unless otherwise agreed upon by parties.²⁸⁴

2. Application to the CISG

¶167 The scope of the Model Law is intentionally broad, to give the “widest possible application” to electronic communications to facilitate its increasing international use.²⁸⁵ The framework purposefully does not set forth every electronic contracting contingency. Instead, it defines key terms with open-ended wording to include enough guidance for States to apply terms as best fitting circumstances. The open-ended choice is based on the functional-equivalent approach toward electronic communications. Model Law drafters believe that “electronic records can provide the same level of security as paper and, in most cases, a higher degree of reliability and speed, especially with respect to the identification of the source and content of the data.”²⁸⁶

¶168 Perhaps more importantly, the Model Law advises that it can be a “tool” to interpret “existing international Conventions. . . that create legal obstacles.”²⁸⁷ Its “media neutral”²⁸⁸ approach to electronic commerce methods as paper-alternatives to communication, storage and authentication reflects the United Nation’s recognition of them as international trade customs.²⁸⁹ Although it has been established in Part IV, *supra*, that computer-based contracts are acceptable under the CISG, the Model Law also fills the electronic contract gap in Article 13 if states incorporate Model Law provisions into their legislation or create similar legislation themselves. The CISG Article 96

²⁷⁸ *Id.* at chap. I.E.17; *see also* discussion *infra* Part V.A.1.

²⁷⁹ *Id.* at art. 11(1).

²⁸⁰ *Id.* at art. 2(a). “Data message” means information generated, sent, received or stored by electronic, optical or similar means including, but not limited to, electronic data interchange, electronic mail, telegram, telex or telecopy; *see also id.* at art. 6.

²⁸¹ *Id.* at art. 7. The importance of the electronic signature provision stems from a common Internet concern about identity. *See Kennedy supra* note 80. Authentication measures are crucial to acceptance of data signatures. For more information on digital signatures and authentication, see Balloon, *supra* note 17.

²⁸² UNCITRAL MODEL LAW ON E-COMMERCE, *supra* note 265, at art. 8(1)(a). A data message satisfies originality of a reliable image exists “when first generated in final form.” Integrity is established when the message “remain[s] complete and unaltered” apart from the “addition of any endorsement and any change which arises in the normal course of communication, storage and display.” *Id.* at art. 8(3)(a-b).

²⁸³ *Id.* at art. 15.

²⁸⁴ *Id.*

²⁸⁵ *Id.* at pmb. ¶ 3.

²⁸⁶ *Id.* at *Guide to Enactment*, chap. I.E.17. This assumes that “a number of technical and legal requirements are met.” Some of the reasons paper-based contracts are a concern include the following: legibility, alteration, copy, authentication, and acceptability in courts. *Id.* at chap. I.E.16.

²⁸⁷ *Id.* at chap. I.A.5.

²⁸⁸ *Id.* at chap. I.A.6.

²⁸⁹ *Id.* at pmb. ¶ 2.

reservation allows States to make a declaration in accordance with Article 12 to require that sales contracts “be concluded in or evidenced by writing” as required by domestic legislation.²⁹⁰ For example, a seller in Australia could specifically require its Romanian buyer to use electronic contracts or assume that these means are acceptable because of existing domestic legislation.

¶169 Although the Model Law is not a compulsory piece of legislation, UNCITRAL efforts to provide international recognition for paperless contracts are influential over States whose laws do not equally protect or are silent on electronic contracts.²⁹¹ U.N. efforts have not stopped at the Model Law on Electronic Commerce. In 2001, UNCITRAL adopted model laws on electronic signatures: UNCITRAL Model Law on Electronic Signatures.²⁹² It reinforces the signature principles of the Model Law on E-commerce to help States build reliance and achieve harmonization on digital marks for legal effect as a functional-equivalent to handwritten signatures.²⁹³

B. Domestic: U.S. Electronic Contracting Acceptance Efforts

¶170 UNCITRAL’s goal to influence domestic legislation has become a reality.²⁹⁴ The United States, the world’s largest e-commerce participant,²⁹⁵ has followed UNCITRAL’s quest to remove obstacles from the free flow of electronic commerce—to make it an accountable contracting method for international business.²⁹⁶ In particular, the U.S. has enacted one federal statute, E-SIGN, and two model codes, UETA and UCITA, which states have the option to adopt.²⁹⁷ Although Section B merely introduces the underlying principles and applications of domestic e-commerce law, the compelling thread linking each piece is the direct endorsement of electronic contracts as a valid *writing* which is given equal legal accord with its paper predecessor.

1. E-SIGN

¶171 The United States’ enactment of E-SIGN combines the major tenets of the UNCITRAL Model Laws on E-commerce and E-Signatures within the first section of the statute. It provides a general rule for signatures, contracts, “or any other record relating to such transaction” that will not be “denied legal effect, validity, or enforceability solely

²⁹⁰ CISG, *supra* note 18, arts. 12, 96; *see also Annotated Text of CISG*, at <http://cisgw3.law.pace.edu/cisg/text/e-text-96.html#commentary> (last visited Jan. 26, 2004), *derived from* ALBERT H. KRITZER, GUIDE TO PRACTICAL APPLICATIONS OF THE UNITED NATIONS CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS (Kluwer Law 1994).

²⁹¹ Nichols, *supra* note 33, at 1404-05.

²⁹² U.N. MODEL LAW ON ELECTRONIC SIGNATURES, U.N. Doc.A/56/588, U.N. Sales No. E.02.V8 (UNCITRAL 2001), [hereinafter U.N. MODEL LAW ON E-SIGNATURES].

²⁹³ *Id.* at pmb1. *See* “Electronic signature” at art. 2, “Equal treatment of signature technologies” at art. 3, “Conduct of signatory” at art. 8, “Conduct of the certification service provider” at art. 9, and “Recognition of foreign certificates and electronic signatures” at art. 12. “If a digital signature means 150 different things in 150 different countries, it becomes impossible to do business electronically.” *Making Rules for Electronic Commerce*, ICCWBO, at http://www.iccwbo.org/home/news_archives/1997/making_rules.asp (Nov. 14, 1997).

²⁹⁴ *See generally* Baker & MacKenzie, *supra* note 268.

²⁹⁵ *See* Vigoroso, *supra* note 9.

²⁹⁶ *See generally* Poggi, *supra* note 14, at 238.

²⁹⁷ *See infra* Part V.B.1-3.

because it is in electronic form.”²⁹⁸ This applies to both consumer and business transactions.²⁹⁹ In essence, E-SIGN gives equal footing to paperless contracts as paper contracts so that parties may transact “without ever exchanging documents in paper format.”³⁰⁰ Thus, when a person clicks on “I agree,” he or she is bound.³⁰¹ E-SIGN ushers in paperless contracting without preferring one technology over another and preempting state legislation which may wish to attempt such regulation.³⁰²

2. Uniform Electronic Transactions Act (UETA)

¶72

Similar to its federal counterpart, E-SIGN, UETA is the state model law that also protects electronic signatures or records from being “denied legal effect or enforceability solely because it is in electronic form.”³⁰³ It assures the public that online contracts are valid. Like the CISG, the UETA aims not to be formulistic. For example, it does not require a *writing* but instead states that whenever a formal writing requirement exists, it can be satisfied by electronic means as long as the signature method ensures the intention to sign.³⁰⁴ The UETA also has exclusions, which include testamentary documents, most of the UCC, and other specifically identified statutes.³⁰⁵ Although the UETA focuses more on the intent to sign than just the presence of an electronic document itself as in E-SIGN, the UETA places greater emphasis on which party bears responsibility in case of an error. The UETA favors the party relying on the mistake, to ensure that web-site designers craft contracts and other agreements to ensure maximum visibility and interaction, thereby increasing the chance that when a party clicks on a button to affix consent, he or she really means it.³⁰⁶ Electronic agents are also considered to be valid forms of contracting under the UETA, even if its users are unaware of or do not review the contents of agents’ transactions.³⁰⁷ If a state adopts the UETA, however, it by no means forces parties to accept an electronic signature unless parties have agreed to transact electronically.³⁰⁸

²⁹⁸ 15 U.S.C.A. § 7001 (a)(1)-(2) (2000). An electronic signature is defined as “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.” 15 U.S.C.A. § 7006(5) (2000).

²⁹⁹ *Id.*; see also Poggi, *supra* note 14, at 239.

³⁰⁰ Winters, *supra* note 43; see also Kenneth R. Costello, *Franchise Sales on the Internet*, 7/01/02 FRANCHWLD 37, available at 2002 WL 11450317.

³⁰¹ 15 U.S.C.A. § 7001 (c)(1) (2000).

³⁰² Winters, *supra* note 42. The only way that E-SIGN may not preempt state legislation is if a state has adopted the Uniform Electronic Transactions Act or institutes similar alternate procedures that are not contrary to E-sign. See E-SIGN, *supra* note 16, at § 7002 (a)(1)-(2); see discussion *infra* Part V.B.2.

³⁰³ UNIFORM ELECTRONIC TRANSACTIONS ACT § 7 (a) (2001) [hereinafter UETA]. This text has been adopted in part or whole by thirty-eight states plus the District of Columbia. *Table of Jurisdictions Wherein Act Has Been Adopted*, UETA (West 2003).

³⁰⁴ See UETA, at §§ 7(c)-(d), 2(7) (contains definition of electronic record), 2(8) (contains definition of electronic signature).

³⁰⁵ Fry, *supra* note 51, at 254.

³⁰⁶ *Id.*

³⁰⁷ See Coyle & Wetzel, *supra* note 17.

³⁰⁸ See Poggi, *supra* note 14, at 238.

3. Uniform Computer Information Transactions Act (UCITA)

¶73 The third important piece of U.S. domestic legislation is the controversial UCITA, drafted by the National Conference of Commissioners on Uniform State Laws, as a “commercial contract code for the computer information transaction.”³⁰⁹ It reflects an achievement after many failed attempts to convert UCC Article 2 into a software and information-based licensing clone.³¹⁰

¶74 UCITA mainly applies to software licenses, licenses to access online databases, website user agreements, and “agreements for most Internet based information.”³¹¹ The biggest concern with UCITA is that it favors software sellers’ rights over those of consumers, which would not exist in a non-UCITA jurisdiction.³¹² UCITA usurps these rights in the following manner: 1) consumers often must agree to contract terms before reviewing them, 2) sales are conditioned on license agreements instead of sales agreements, which forces a user to agree to set terms before purchase, 3) because the licensor drafts the agreement (and thus chooses the language), the licensor chooses the most favorable jurisdiction.³¹³ UCITA diverges from E-SIGN and the UETA by rejecting “signature” terms in favor of “authentication,” which includes sounds, encryption, or any other process including recording or adopting a symbol that indicates a party has identified himself as adopting, accepting or verifying the content and terms of the record.³¹⁴ The authentication process should be technologically neutral and provide sufficient evidence for affirmation and identification.³¹⁵

¶75 Virginia is the first of only two states to enact UCITA, claiming jurisdiction unless parties contract otherwise before agreement.³¹⁶ Iowa, in contrast, found UCITA so outrageous that it instituted a “bomb-shelter” provision “expressly forbidding any party from enforcing UCITA as a choice of law against any Iowa citizen or business.”³¹⁷

¶76 Although UCITA is the least accepted of the U.S. E-commerce related laws (or model laws), its presence as a body of legal work represents an important step in the evolution of domestic computer transaction law. Despite its controversial nature, UCITA presents yet another example of the accepted nature of computer-based contracts which prevail in international business transactions to comport with and to perhaps fill the gap in the CISG.

C. Making the CISG and Article 13 subject to domestic legislation

¶77 Unless the CISG is the domestic law of a State,³¹⁸ domestic rules are generally not evaluated in a CISG dispute. Recall, the purpose of the CISG is to provide a neutral

³⁰⁹ UNIFORM COMPUTER INFORMATION TRANSACTIONS ACT, Prefatory Note (1999), available at <http://www.law.upenn.edu/bll/ulc/ucita/ucita01.htm> [hereinafter UCITA].

³¹⁰ Winters, *supra* note 43.

³¹¹ Brian D. McDonald, *The Uniform Computer Information Transactions Act*, 16 BERKELEY TECH. L.J. 461, 461 (2001).

³¹² *Id.* at 463.

³¹³ *Id.* at 464; see UCITA, *supra* note 309.

³¹⁴ UCITA, *supra* note 309, at Part I.A, cmt 4.

³¹⁵ *Id.*

³¹⁶ McDonald, *supra* note 311, at 466.

³¹⁷ *Id.* at 468-69.

³¹⁸ See discussion *supra* Part II.B.

choice of law for different contracting States.³¹⁹ However, they may be relied upon for a contract *writing*, under Article 11, which allows States to require domestic *writing* form.³²⁰ This is accomplished by Article 12 and 96 reservations, which allow the writing requirement to apply to contract formation and modification (Article 29).³²¹ Therefore, parties who are subject to the CISG could require electronic contracts, paper contracts, or remain silent on the issue. In this case, all methods would be acceptable. For example, a U.S. seller could require a German buyer to conform to the requirements of U.S. law, which includes electronic contracting as an acceptable *writing*. Here, domestic laws favor a liberal interpretation of Article 13 because U.S. legislation gives equal weight to electronic contracts as paper contracts.³²² Each State, however, has its own domestic contract laws.³²³ Therefore, parties must specify the choice of law when engaging in international sales. If the CISG is chosen, as is common to avoid a battle of the forms, electronic contracts are acceptable contract writings. The complexity of domestic law underlies the purpose of the CISG: to create uniformity for international sales contracts.³²⁴

¶78 No precedent, other than the two aforementioned fax cases, has been found regarding electronic contract validity under the CISG.³²⁵ Perhaps this results from electronic contracts already being naturally accepted as CISG *writings*. Alternatively, merchants find non-legal recourses to disputes, preferring to focus on maintenance of the commercial relationship or quickly resolving the matter instead of resorting to litigation. Nonetheless, merchants should feel confident that when applying the CISG to international sales contracts, Article 13 evaluation will favor electronic contracts. Merchants can further rely on the U.N. Model Laws on Electronic Commerce and Electronic Signatures and, in many states, domestic legislation for support.

VI. CONCLUSION

¶79 Because the CISG is the foremost authority on international sales, the absence of computer-based contracts in the definition of a contract *writing* could theoretically leave

³¹⁹ See discussion *supra* Part II.

³²⁰ BERNARD AUDIT, *LEX MERCATORIA AND ARBITRATION*, (Thomas E. Carbonneau ed., rev. ed. Juris Publishing 1998) 184 n.48, available at <http://cisgw3.law.pace.edu/cisg/biblio/audit.html> (last visited Feb. 7, 2004).

³²¹ See generally *id.*

³²² However, States could just as easily invoke the same reservations to exclude electronic contracts. If parties choose to do so, CISG principles would not be violated because these changes were subject to a pre-ratification declaration. See E-SIGN, *supra* note 16.

³²³ Domestic laws, such as those exemplified by the United States, do not always neatly comport with international trade needs. Domestic laws are often characterized as reactive instead of proactive. See AUDIT, *supra* note 320; Nichols, *supra* note 32, at 1406.

³²⁴ See Philip Hackney, Comment, *Is the United Nations Convention on the International Sale of Goods Achieving Uniformity?*, 61 LA. L. REV. 473, 474 (2001).

³²⁵ See *supra* Part IV.A.1; see also [Schmitz-Werke v. Rockland](#), 37 Fed. Appx. 687 (4th Cir. 2002), available at 2002 U.S. App. Lexis 12336 (“case law interpreting the CISG is rather sparse,” citing *Claudia v. Olivieri Footwear Ltd.*, No. 96 Civ. 8052 (S.D.N.Y. April 7, 1998), available at 1998 WL 164824). Prof. John Honnold chides that the reason why the U.S. has so little case law on the CISG is that its courts are overcrowded with domestic matters; thus, settlement is the preferred dispute mechanism. Furthermore, European countries have more experience using the CISG because of its 1964 Hague Convention predecessor. Hackney, *supra* note 324, at 480-81.

a significant legal gap in the commercial certainty and predictability of international sales. Electronic contracts have both complicated and facilitated international sales transactions with faster and easier methods of conducting business: even one person with a computer and an Internet connection can become an agile global competitor. This comment has argued that although CISG's Article 13 does not explicitly mention electronic contracting methods as acceptable forms of *writing*, they are organically included in the CISG by way of Article 13's history and legislative intent, relationship with other articles and scope implied through precedent. Businesses, legal practitioners, and justice systems alike should understand the CISG's capacity, which provides for an expansive scope to develop with the global marketplace, without additional revision. International and domestic legislation is constantly modernized to account for electronic communications to ensure certainty and predictability in commercial transactions, which additionally supports Article 13's inclusion of electronic contracting through reservation or international commercial custom. Accordingly, the United Nations Convention on Contracts for the International Sale of Goods remains an enduring code, flexibly adapting to new trade customs while retaining uniform principles to assist international sales, that earned its adoption by two-thirds of nations engaged in global trade.³²⁶

³²⁶ CISG extension has been contemplated, in the following areas: consumer protection, new scope definition beyond goods to include services, and the adaptation of contract formation rules "beyond merely incorporating the electronic contracting provisions of the [UNCITRAL] Model Law [on Electronic Commerce]." Boss, *supra* note 84, at 143.