



ELECTRONIC COMMERCE AND THE UN CONVENTION ON CONTRACTS FOR THE
INTERNATIONAL SALE OF GOODS (CISG)

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I. INTRODUCTION

The text of the United Nations Convention on Contracts for the International Sale of Goods (hereinafter “CISG”)¹ is a quarter of a century old. The drafting process ended in 1980 and the Convention entered into force in 1988. Since then, the CISG became potentially applicable to international trade transactions within a group of States that account for over two-thirds of world trade.² While the number of Contracting States increased, the reality of international trade changed significantly with the development information technology tools, particularly after the beginning of the 1990’s. Parties began to conclude international contracts by using those tools, giving birth to the expression “electronic commerce” (or simply “e-commerce”); even in cases where the contract was concluded by more traditional means, international commerce players began to interact with each other electronically in order to deal with post conclusion matters, such as the performance of the contract³.

These changes in the behavior of the actors of international trade were certainly not foreseen by the drafters of the CISG; indeed, there are no specific provisions in the Convention dealing with the issues that arise in e-commerce. Since the CISG is a multilateral treaty with many Contracting States, a proposal of concluding a protocol to the CISG would certainly take a long time, if a compromise is indeed possible⁴. If changing the CISG is not an alternative in a short term, the question is whether the CISG itself could provide a workable framework for e-commerce transactions. That is the topic explored in this paper.

The CISG has a provision dealing specifically with gap-filling: Article 7(2). Under this provision, gaps (or, to use the CISG definition, “matters governed by [the] Convention which are not expressly settled in it”) are to be filled in “in conformity with the general principles on which it is based”; only in the absence of such principles the matters will have to be solved by recourse to the domestic law applicable by virtue of the conflict of law rules. Therefore, if some of the issues related to e-commerce are not expressly settled by the Convention, the CISG itself might nevertheless provide the tools to develop a rule to solve these questions.

¹ See 19 I.L.M. 668 (1980) and 52 F.R. 6262-02 (United States internal notice of ratification, on March 2, 1987).

² See Andrea L. Charters, *Fitting the ‘Situation’: the CISG and the Regulated Market*, 4 WASH. U. GLOBAL STUD. L. REV. 1, 2 (2005). For an updated list of Contracting States, see <[<http://www.uncitral.org/english/status/status-e.htm#United Nations Convention on Contracts for the International Sale of Goods \(Vienna, 1980\)>](http://www.uncitral.org/english/status/status-e.htm#United Nations Convention on Contracts for the International Sale of Goods (Vienna, 1980))> (last visited Apr. 19, 2005).

³ The expression “e-commerce” will be used in the paper in broad terms, meaning every trade transaction where the parties use electronic means of communication (not necessarily just to conclude the contract), but also for post conclusion interactions.

⁴ There is, however, a proposal for a Draft Convention on Electronic Communications (see *infra* note 48), sponsored by the UNCITRAL, which is intended to have an impact on several international conventions, including the CISG. However, unless all the Contracting States to the CISG adopt the new Draft Convention, the risk is that it will undermine the purpose of the CISG in achieving uniformity; on this problem, see note 54 *infra*.

I.1. The Problem of Dealing with Technologies: Methodological Issues

Law and technology develop in different paces. Technology changes very fast, whereas the process of developing new legal rules is significantly slower. If that is so, a statutory rule that undertakes to describe in detail technical solutions – which can in a short period of time be replaced by more advanced ones – will soon be obsolete along with the technologies, possibly even before being applied.⁵ Thus, a “technologically neutral” approach, *i.e.*, not driven by specific technologies, should be favored in the process of developing legal rules. A similar methodology should be used in order to address the issues arising from e-commerce within the framework of the CISG. Therefore, instead of seeking individual solutions for the issues relating to the use of each of the several technologies available, it is more appropriate to group the technologies in accordance with two criteria: (a) their function or role in e-commerce and (b) the characteristics of these technologies that create some problems under the CISG. Once technologies are properly categorized, the analysis yields a more principled outcome, rather than casuistic and fragmental conclusions. A principled outcome is more resistant to technological developments because: (a) new technologies will probably fit in those categories and, absent a compelling reason based on a specificity of that technology, the solution will be same for the other ones in the group; (b) if the characteristics of a particular technology changes, there might be another category for that new technology and, consequently, a ready-made solution for the common issues. Of course, the analysis will sometimes require recourse to “technological specific” examples for didactic purposes, since an extremely abstract study would probably be unintelligible. Moreover, if a technology has a relevant specificity that is not categorized, then the analysis might become more casuistic in order to make a solution to an individual problem possible.

Having said that, this paper will be based on a division of the available technologies in two great groups, according to the role they play in each individual transaction. The first one includes (1) technologies that simply extend the human ability to communicate, *i.e.*, those that are used only to permit two *persons* to overcome the distance between them and interact with each other. The second one covers (2) technologies that play an active role in the formation of the sales contract, *i.e.*, those that turn human intervention in the conclusion of an *individual* agreement unnecessary, since an information system issues by itself a message with an intention of binding the party who programmed that system to do so. Each of those great groups has subcategories, designed according to the characteristics that are relevant for CISG purposes.

I.1.1. Technologies that merely extend human ability to communicate

The first group subdivides in two: (1.1) the *instantaneous* communication technologies and (1.2) the *non-instantaneous* communication ones. The non-instantaneous are those in which there is a delay between the instant a message is sent and the moment it becomes available to the recipient⁶. In that aspect, those technologies are similar to regular mail; an example of those technologies is electronic mail (“e-mail”), which, once sent over the Internet, might take some time to become

⁵ On that issue, see Ricardo L. Lorenzetti, *COMERCIO ELECTRÓNICO* 7 (Buenos Aires, Abeledo-Perrot, 2001).

⁶ Due to that, *non-instantaneous* communication technologies are deemed to be *inter absentes* (see definition in the next paragraph of the text above).

available to the recipient. In contrast, a data message sent via *instantaneous* communication technologies becomes available to the recipient at the moment it is dispatched.

This subcategory has two other sub-subcategories. The first one includes (1.1.1) the instantaneous *inter praesentes* communication technologies, *i.e.*, the ones in which by their nature there is simultaneous reception and cognizance of the message by the recipient, such as Internet telephony⁷ and text chats; those means can be compared with a “regular” telephone conversation. The second sub-subcategory includes (1.1.2) the instantaneous *inter absentes* communication technologies, the ones in which reception of the message and cognizance of its content happen in different moments; for instance, a fax message, which is transmitted in real-time a telephone line, but might be read later on by the recipient; telex falls also under this sub-subcategory, an older and currently less usual technology expressly mentioned in Article 13 of the CISG.

(1) TECHNOLOGIES THAT MERELY EXTEND HUMAN ABILITY TO COMMUNICATE		
(1.1) INSTANTANEOUS		(1.2) NON-INSTANTANEOUS
(1.1.1) <i>Inter absentes</i>	(1.1.2) <i>Inter praesentes</i>	Always <i>inter absentes</i>
EXAMPLES Fax message	EXAMPLES Internet telephony Text chats	EXAMPLES E-mail messages
“SIMILAR” TO Telex	“SIMILAR” TO Telephone conversation	“SIMILAR” TO Regular mail Telegram

1.1.2. Technologies that play an active role in the formation of the contract

The second group of technologies is also divided in two subcategories. The first one includes (2.1) the technologies based on a human/machine interaction, *i.e.*, where one of the parties (a human being) interacts with an information system. In this case, a person – say, the buyer – will by herself issue a data message indicating her intention of being bound by an agreement and an information system, “on behalf” of the seller, will issue another message indicating the intention of the latter of being bound. The second subcategory encompasses (2.2) the technologies based on a machine/machine interaction, *i.e.*, where in both sides of the transaction there are information systems issuing data messages containing each party’s intention of being bound by an agreement.

⁷ There are different technologies to broadcast human voice over the Internet, all them grouped under the name Voice over Internet Protocol (“VoIP”). In this category can be included all teleconference technologies, even those that do not use the Internet to broadcast audio and video.

Each of those subcategories has its own subdivisions. In respect to the first one, *i.e.*, (2.1) human/machine interaction, it includes:

(2.1.1) A group of technologies based on *instantaneous* communication, in the same meaning as above, *i.e.*, the message conveyed becomes available to the recipient at the time it is dispatched. There are further subdivisions:

(2.1.1.1) *Inter praesentes*, where the interaction human/machine happens in real-time. For instance, sales transactions concluded through an interactive web site in the Internet where the conclusion of the contract happens immediately (without, for instance, later confirmation); the order is immediately processed and accepted.

(2.1.1.2) *Inter absentes*, where the interaction is not in real-time. For instance, a sales transaction through a non-interactive web site where the prospective buyer places an order, which immediately becomes available to the seller (*e.g.* it is instantly recorded in a database maintained by the seller), but the information system delays processing the order (the prospective buyer does not receive a response at the moment in which she submits her request).

(2.1.2) A group of technologies based on *non-instantaneous* communication. For instance, web forms for placing orders with automated processing: a prospective buyer fills in a form in a web site with all the information required by the seller; the data typed by the prospective buyer is sent in an e-mail message (non-instantaneous), which is automatically processed by an information system without human intervention. Because of this delay, these communications is always *inter absentes*.

In respect to the second subcategory, *i.e.*, (2.2) technologies used for the formation of a contract without any human intervention on both sides (machine/machine interaction), the classification is identical to the prior one, including:

(2.2.1) A group of technologies based on *instantaneous* communication, subdivided in:

(2.2.1.1) *Inter praesentes*, where the interaction machine/machine happens in real-time (*i.e.*, the data message becomes available instantaneously and is processed by the recipient system at that moment). An example is an Electronic Data Interchange (“EDI”)⁸ arrangement with a real-time connection between the information systems.

(2.2.1.2) *Inter absentes*, where the interaction is not in real-time, such as in an EDI arrangement were a data message is immediately received, but

⁸ Article 2.2 of the European Model EDI Agreement, approved by the Commission Recommendation 94/820, Annex I, 1994 O.J. (L 338) 98, defines EDI as “the electronic transfer, from computer to computer, of commercial and administrative data using an agreed standard to structure an EDI message”. See also Christopher Nicoll, *E.D.I Evidence and the Vienna Convention*, J. BUS. L. 21, 23 (1995) (defining EDI as “[t]he electronic transfer of formatted data messages between computer applications running on separate computers, using agreed standards to describe the format of data contained in the messages”).

processing is delayed. Processing might be delayed, for instance, in an EDI arrangement based on a “store and retrieve” scheme⁹.

(2.2.2) A group of technologies based on *non-instantaneous* communication. An example of this is an EDI arrangement supported by non-instantaneous means of communication (*i.e.*, the reception of the message is delayed and does not happen at the same time it is sent). Since the communication is not instantaneous, it is always *inter absentes*.

(2) TECHNOLOGIES THAT PLAY AN ACTIVE ROLE IN THE FORMATION OF THE CONTRACT					
(2.1) HUMAN/MACHINE INTERACTION			(2.2) MACHINE/MACHINE INTERACTION		
(2.1.1) Instantaneous		(2.1.2) Non-instantaneous	(2.2.1) Instantaneous		(2.2.2) Non-instantaneous
(2.1.1.1) <i>Inter absentes</i>	(2.1.1.2) <i>Inter praesentes</i>		(2.2.1.1) <i>Inter absentes</i>	(2.2.1.2) <i>Inter praesentes</i>	
EXAMPLES	EXAMPLES	EXAMPLES	EXAMPLES	EXAMPLES	EXAMPLES
.Non-interactive automated web site	.Interactive automated web site	.Orders placed via web-forms, where the messages are automatically processed by the recipient system	.EDI with instantaneous receipt, but delayed processing	.EDI with real-time detection and processing	.EDI with delayed receipt (time of dispatch ≠ time of receipt)

1.2. Structure of the Analysis

This paper is structured in two parts. The purpose of the first Part is to determine whether the rules of the CISG in respect to the internationality of sales contract and its personal sphere of application (Part II.1), as well as the rules on the Convention’s substantive sphere of application (Part II.2), can be used to determine whether a particular e-commerce transaction is governed by the CISG. In the second Part, the substantive provisions of the CISG will be examined in order to verify whether they would cover electronic pre-contractual (Part III.2) and contractual (Part III.3) communications between the parties; that analysis will require that the general rules on form requirements of the CISG be examined in the search for principles suitable to fill-in eventual gaps in the text of the Convention (Part III.1).

⁹ In an EDI arrangement based on a “store and retrieve” scheme, the data messages are posted in a mailbox under the control of the recipient; the recipient EDI system processes the messages when it retrieves them from the information system where the mailbox is located. The process of retrieving the messages can be automated or triggered by human action.

II. APPLICABILITY OF THE CISG TO E-COMMERCE CONTRACTS

The provisions of the CISG regarding its sphere of application raise relevant issues within the context of contract of sales concluded by electronic means. Aiming to set the limits to the application of the Convention, the drafters relied on legal concepts that are usually¹⁰ seen as related to physical reality; those legal concepts, once applied to electronic contracts matters, may cause certain difficulties. Those difficulties will be examined in this Part II.

The sphere of application of the CISG, *i.e.*, its applicability to certain contracts, is governed by Articles 1, 2, 3 and 10¹¹. To determine its applicability, the Convention relies on elements related to (a) the parties (and their connection to a Contracting State of the CISG) and (b) to the transaction itself, as explained below. The first set of elements shapes the CISG's *personal* sphere of application, which will be examined in Part II.1; the second set of elements delimitates the CISG's *substantive* sphere of application, which will be examined in Part II.2.

II.1. Internationality, Personal Sphere of Application and E-Commerce

II.1.1. Overview and potential issues

Assuming that the forum State (where a CISG-related case is brought) is a Contracting State to the Convention, the first requirement to be met in order for the treaty to be applicable is the internationality of the contract, as the Convention provides that it “applies to contracts [...] between parties whose places of business are in different States”¹². The definition of internationality is related exclusively to the *parties*: the sole requirement is that their *places of business* be in different jurisdictions. Internationality must nevertheless be apparent at the time of the conclusion of the contract, as required by Article 1(2)¹³, and, therefore, the transaction will not be international if one of the parties relied on the domestic setting of their dealings (and had no reason not to rely on it). The Convention does not expressly define “place of business”¹⁴: the only provision that provides guidance to determine the parties' places of business is Article 10, but it is only applicable to the situations where one of parties has multiple places of business; it provides that the relevant place of business is the one “which has the closest relationship to the contract

¹⁰ The exception is the concept “contract of sale”, which is a pure legal definition which does not rely on elements attached to the physical reality, but nevertheless raises issues in some instances of electronic commerce, as it will be explained below (*see infra* Part II.2.2).

¹¹ Article 6, which gives the parties autonomy to exclude the application of the Convention or to derogate some of its provisions (with the exception stated in Article 12) could also be considered as defining the sphere of application of the Convention; however, that provision is not relevant for the purposes of this paper. Articles 4 and 5, by excluding some issues from the coverage of the CISG, deal with the *scope* of application of the CISG, *i.e.* the extent to which it is applicable; on that topic, *see* Franco Ferrari, *Scope of Application: Articles 4-5*, in DRAFT UNCITRAL DIGEST AND BEYOND: CASES, ANALYSIS AND UNRESOLVED ISSUES IN THE U.N. SALES CONVENTION 96, 96 (Franco Ferrari et al. eds., Munich, Sellier 2004).

¹² CISG Article 1(1). If the forum is not a Contracting State to the CISG, it might still be applicable by virtue of conflict of laws rules of the forum if those rules point to the law of a Contracting State, assuming that the CISG can be seen as part of the municipal law of that Contracting State. Conflict of laws rules might also offer difficulties in the domain of e-commerce (*see infra* notes 17 and 18 and accompanying text).

¹³ Article 1(2) provides that “[t]he fact that the parties have their places of business in different States is to be disregarded whenever this fact does not appear either from the contract or from any dealings between, or from information disclosed by, the parties at any time before or at the conclusion of the contract”. This provision will be discussed in Part II.1.3.

¹⁴ *See infra* Part II.1.2.1.

and its performance, having regard to the circumstances known to or contemplated by the parties at any time before or at the conclusion of the contract”¹⁵.

However, internationality is not sufficient to determine the applicability of the Convention: either the requirement set forth in Article 1(1)(a) or the one in Article 1(1)(b) must be fulfilled. Under Article 1(1)(a), the CISG is *directly* applicable if the parties have their places of business in Contracting States to the Convention, without regard to the conflict of laws rules of the forum¹⁶; in other words, the Convention must be in force in the jurisdictions where the parties have their places of business.

So far, there are two notions that might pose some problems in the e-commerce environment, *place of business* and *parties*, which will be discussed in Parts II.1.2 and II.1.4 below; also, the requirement of apparent internationality also might create some difficulties, as it will be discussed in Part II.1.3. Indeed, while the possibilities opened by the development of new communication technologies allow the parties to deal with anyone in the world, the lack of personal contact and the automation of the process of contracting can be troubling. For instance, one might wonder: (a) where is the place of business of a manufacturer who sells their products through a fully automated and interactive web site on the Internet? (b) If a system accepts orders without human interaction should it be considered a party under the CISG? (c) How to find apparent internationality under Article 1(2) if, due to the frequent lack of personal contact, the parties to an e-commerce transaction do not know whether they are dealing with someone in the neighborhood or in another country?

The CISG might also be *indirectly* applicable by virtue of Article 1(1)(b), *i.e.*, if the conflict of laws rules of the forum “lead to the application of the law of a Contracting State”. That provision however does not raise e-commerce related issues, at least not within the framework of the Convention. Of course, depending on the connecting factors used by the conflict of laws rules of the forum, an electronic contract might represent several difficulties¹⁷, but those connecting

¹⁵ CISG Article 10(a). Article 10(b) deals with the situations where one of the parties does not have a place of business, providing that, in such cases, “reference is to be made to his habitual residence”.

¹⁶ Indeed, the CISG, as uniform law trumps the conflict of laws rules of the forum and therefore, once its applicability requirements are met, it will govern the issue directly. See Peter Winship, *Private International Law and the U.N. Sales Convention*, 21 CORNELL INT’L L.J. 487, 520 (1988) (stating that “the purpose of subparagraph (1)(a) is to eliminate the need to go through a conflicts analysis to determine whether the Convention applies”). If fact, there is case-law holding that the CISG, as uniform law, preempts the conflict of laws rules of the forum; see *Rheinland Versicherungen v. Atlarex S.r.l.*, Tribunale [District Court] di Vigevano, Italy, 12 July 2000, Case Number 405, translation to English available at <<http://cisgw3.law.pace.edu/cases/000712i3.html>> (last visited Mar. 20, 2005) (holding that “[u]niform substantive law is more specific *per definitionem* than the rules of private international law because the former settles ‘directly’ the question of applicable substantive law”); *Tessile 21 S.r.l. v. Ixela S.A.*, Tribunale [District Court] di Pavia, Italy, 29 December 1999, available at <<http://cisgw3.law.pace.edu/cases/991229i3.html>> (last visited Apr. 6, 2005) (stating that “one must prefer the relevant norms of uniform law created by international conventions which, by reason of their [*specificity*], prevail over conflict rules”).

¹⁷ See, e.g., the RESTATEMENT (SECOND) ON CONFLICT OF LAWS § 188(2) (1971), the general provision on the applicable law to contracts in the absence of a choice of law agreement, which lists elements to determine the place which has the “most significant relationship” with a contract. Some of those elements naturally pose some difficulties in e-commerce, such as “place of contracting” (§ 188(2)(a)), “place of negotiation of the contract” (§ 188(2)(b)) and “place of business of the parties” (§ 188(2)(e)); others offer some problems when the seller also performs its obligation by electronic means (e.g. an acquisition and simultaneous download of a software over the Internet), such as the connecting factors “place of performance” (§ 188(2)(c)) and “location of the subject matter of the contract” (§ 188(2)(d)). For a comment on the insufficiency of the Restatements First (*lex loci delicti*) and Second (“most significant relationship”) approaches for torts in the cyberspace, as well of the Restatement Second and the Rome Convention approaches for electronic contracts, see Matthew Burnstein, Note, *Conflicts on the Net: Choice of Law in Transnational Cyberspace*, 29 VAND. J. TRANSNAT’L L. 75, 92-96 (1996).

factors are defined and qualified in accordance with the standards of domestic law¹⁸ and, hence, are not covered by the CISG.

II.1.2. Place of business and cyberspace

The starting point to determine the place of business of the parties in cyberspace would be the definition of place of business for regular transactions under the CISG. However, the Convention does not define it expressly, although it has been held that an autonomous definition of place of business can be derived from the CISG without recourse to domestic law (and, hence, without undermining the CISG's unification purpose).

II.1.2.1. Guidelines in the CISG: stability, autonomous character and substantial connection

The place of business of each party is determined on a case-by-case basis; nevertheless, it has been said that there are some guidelines in the CISG¹⁹. Those guidelines can be found in the purpose of Article 1²⁰, as well as in its context in the Convention, particularly in light of what Article 10(a) provides. It is accepted that the mere place of contracting and the place where the negotiations have taken place are not relevant for that definition; indeed, reference is made to a *permanent and stable business organization* and not to the place where only preparations for the conclusion of the single contract have been made²¹. Aside from *stability*, the *autonomous character* of the place of business is also required²², *i.e.*, the place of business is where there is autonomous power to conclude the transaction with the other party²³. In fact, a German court stated that “[a] place of

¹⁸ See Note by the Secretariat (*Legal aspects of electronic commerce – Possible future work in the field of electronic contracting: an analysis of the United Nations Convention on Contracts for the International Sale of Goods*), UNCITRAL Working Group on Electronic Commerce, 38th Sess. at 6 (¶ 19), U.N. Doc. A/CN.9/WG.IV/WP.91 (2001), available at <http://www.uncitral.org/english/workinggroups/wg_ec/index.htm> (last visited Mar. 20, 2005) [hereinafter “UNCITRAL eCommerce WkG: Secretariat Note on e-Contracting and CISG”] (stating that the use of electronic means in the conclusion of international sales contracts in the context of Article 1(1)(a) of the CISG only becomes relevant “where the rules of private international law of the forum refer, as a connecting factor, to the place of conclusion of the contract”); See also Franco Ferrari, *Brief Remarks on Electronic Contracting and the United Nations Convention on Contracts for the International Sale of Goods (CISG)*, 6 VINDOBONA J. 289, 293 (2002).

¹⁹ See Franco Ferrari, *The CISG's Sphere of Application: Articles 1-3 and 10*, in DRAFT UNCITRAL DIGEST AND BEYOND: CASES, ANALYSIS AND UNRESOLVED ISSUES IN THE U.N. SALES CONVENTION 21, 27 (Franco Ferrari et al. eds., Munich, Sellier 2004).

²⁰ See Erik Jayme, *Article 1*, in BIANCA-BONELL COMMENTARY ON THE INTERNATIONAL SALES LAW 27, 30 (Cesare Massimo Bianca ed., Milan, Giuffrè, 1987), available at <<http://cisgw3.law.pace.edu/cisg/biblio/jayme-bb1.html>> (last visited Mar. 26, 2005).

²¹ See *id.* at 30. The stability requirement was expressly mentioned in *Oberlandesgericht [Provincial Court of Appeal] Stuttgart*, Germany, 28 February 2000, Case Number 5 U 118/99, English translation available at <<http://cisgw3.law.pace.edu/cases/000228g1.html>> (last visited Mar. 26, 2005).

²² See Franco Ferrari, *The Relationship between International Uniform Contract Law Conventions*, 22 J.L. & COM. 57, 69 (2003).

²³ The requirement of autonomy underlies several decisions holding that the place where liaison offices or distributors conduct their activities is not the place of business of the seller; if those offices do not have autonomy to conclude the sales agreement independently from the seller, they are not places of business of the seller and do not serve as basis for internationality. On that matter, see *Asante Technologies, Inc. v. PMC-Sierra, Inc.*, 164 F.Supp.2d 1142, 1147-49 (N.D.Cal. 2001), available at <<http://cisgw3.law.pace.edu/cases/010727u1.html>> (last visited Mar. 26, 2005) (holding that the seller had its place of business in Canada, since the goods were manufactured in Canada, the corporate headquarters of the seller were in Canada, and the alleged breaches of representation were made from Canada; rejecting contention that the seller's U.S. based distributor was an agent of the seller and stating that the buyer's dealings with the distributor did not establish seller's place of business in the U.S.); *ICC Court of Arbitration*, Paris (France), Case Number 7531, 6 THE ICC INTERNATIONAL COURT OF ARBITRATION BULLETIN 67, n.2 (1995), case abstract available at <<http://cisgw3.law.pace.edu/cases/947531i1.html>> (last visited Mar. 26, 2005) (holding that the fact that the buyer had conducted part of the negotiations through its liaison office situated in the seller's country was of no relevance for the purposes of internationality under the CISG).

business exists if a party uses it openly to participate in trade [...], which means that the place of business must not be merely temporary and must display a certain degree of independence” and, based on that premise, held that a Spanish representative of a German seller “did not possess an independent authority to act in the form of power to decide upon and close a deal”, since “negotiations concerning the formation of a contract, prices, delivery periods and remedies had to be held with the [seller]”²⁴.

In the domain of electronic commerce, the rule set forth in Article 10(a) is particularly relevant. As it was mentioned elsewhere²⁵, Article 10(a) deals with the situation where a party has multiple places of business, providing that, for CISG purposes, the place of business is the one “which has the closest relationship to the contract and its performance”²⁶. Pursuant to this provision, the circumstances relevant to determine whether a place of business meets that definition are the ones “known to or contemplated by the parties at any time before or at the conclusion of the contract”. The reference to the relationship with the contract and (particularly) to its performance in Article 10(a) reveals that determination of the relevant place of business is not formalistic neither abstract but, as pointed in scholarly writing, based on a “more substantial and real connection”; what matters is not the head office, but “the place from which the transaction is to be performed”²⁷.

II.1.2.2. Determining place of business in e-commerce

As far as the group of technologies whose purpose is to extend human ability to communicate (e.g. e-mail, text chat, Internet Telephony) is concerned, the concept of place of business does not pose any additional difficulties compared to traditional transactions *inter absentes* using instantaneous or non-instantaneous communication tools (e.g. contract of sales concluded by letter, telegram, telex²⁸), or *inter praesentes* (e.g. phone)²⁹. Those technologies serve only to connect two persons located in different places and allow them to negotiate their agreement. Technologies for interpersonal communication do not create new relationships (or connections) of the parties with different jurisdictions. For instance, in a case of a contract of sale concluded in a voice call over the Internet, the seller and the buyer are reaching each other by means of a global information network, but both of them, at least in principle, remain on their respective places of business. Indeed, this situation (and others of instantaneous or non-instantaneous communications) is

²⁴ See *Oberlandesgericht Stuttgart*, *supra* note 21.

²⁵ See *supra* note 15 and accompanying text. See also Franco Ferrari, *supra* note 19, at 30 (stating that, “where the parties know that the contract is to be performed at a place of business different from the one involved in the conclusion of the contract, the text of Article 10(a) suggest that the relevant place of business is the one where performance takes place”).

²⁶ Article 10(a) is particularly relevant in this context because the cases in e-commerce where the determination of the place of business might be controversial are those where the use of electronic of means communication creates the impression that the party has more than one place of business; therefore, even if one finds that the elements of the definition of place of business are met for all the possible places of business, Article 10(a) will be applicable to determine the relevant place of business. This matter will be explored in Part II.1.2.2.

²⁷ Erik Jayme, *supra* note 20, at 31. See also *Amtsgericht Duisburg*, Germany, 13 April 2000, available at <<http://cisgw3.law.pace.edu/cases/000413g1.html>> (last visited Apr. 9, 2005) (stating that “[p]lace of business in the meaning of Art. 1 and 10 CISG is the actual place of business”).

²⁸ Telegram and telex are technological means of communication expressly acknowledged by the CISG and, for its purposes, are deemed to be in writing (Article 13). This provision will be examined properly in Part III.1.2.

²⁹ On the distinction between contracts *inter absentes* and *inter praesentes*, see generally Ricardo L. Lorenzetti, *supra* note 5, at 193 (stating that a contract is *inter absentes* when there is a relevant delay between the offer and the acceptance; this delay creates some risks that must be allocated between the parties).

similar to the one where the parties conclude a contract of sale by phone: no one will inquire about a possible “virtual” place of business or consider whether the fact that the voice was transmitted over the network of one or more telephone companies is somehow relevant. However, due to the fact that the parties are not physically present before each other, the use of those technologies poses some problems in respect to the requirement of apparent internationality (or non-reliance on the domestic setting of the transaction)³⁰.

In contrast, when the parties use technologies in a more extensive manner, some difficulties arise in determining where their places of business are.

II.1.2.2.1. Exploring alternatives: possible “places” of business

The situation is different when information systems play an active role in the formation of the contract, since the use of those tools can potentially lead to the conclusion that the parties have other relationships with different States or even with no State at all. Those difficulties arise due to the fact that the sales contract is formed without human intervention for that specific transaction – at least in respect to one of the parties –, creating sometimes the impression that the transaction transcends the physical reality and, therefore, that it does not have any territorial connection. As a consequence, some will say that, for instance, a transaction does not have a relationship with one particular jurisdiction, but was celebrated in a “virtual place”³¹. Based on that, one could say that the parties’ places of business are also “virtual”³², not connected to the territory of any State (for instance, the seller’s place of business would be his web site). The consequence of that view is that the technological environment is a new (non-territorial) space for which special rules should be developed³³; due to that circumstance, it can be used only for *de lege ferenda* purposes and it would certainly be incompatible with the text of the CISG, as it is claimed later on in this paper (Part II.1.2.2.2).

An alternative to adopting a concept of a “virtual” place of business would be to seek to determine the “real” place of business of the parties. However, that is not a simple question, due to the existence of at least three different possibilities: (a) place where the hardware is located, (b) place from where the information system is accessed and (c) no specific rule.

Alternative (a) consists in setting a rule pursuant to which the party who uses information technology tools in the formation of contracts has her place of business where the hardware that

³⁰ See *infra* Part II.1.3.

³¹ For a comment on that view, see Ricardo L. Lorenzetti, *supra* note 5, at 198-99.

³² Indeed, in sharp contrast to the position here adopted, it has been already stated that the CISG would accept a “virtual” place of business. See J.A. Graham, *La Convención de Viena sobre la Compraventa Internacional de Mercaderías y el Comercio Electrónico*, 39 REDI REVISTA ELECTRÓNICA DE DERECHO INFORMÁTICO at ¶ 2 (Vlex, 2001) available at <http://premium.vlex.com/doctrina/REDI_Revista_Electronica_Derecho_Informatico/Convencion_Viena_Compraventa_Internacional_Mercaderias_Comercio_Electronico/2100-115520,01.html> (stating that, if a virtual domicile has been acknowledged by national courts for privacy purposes, it should be extended to the CISG, particularly due to the fact that it can be updated throughout time).

³³ In fact, some commentators suggest that the technological developments should be followed by the development of a new field in the law, often called “Cyberspace Law”. See I. Trotter Hardy, *The Proper Legal Regime for Cyberspace*, 55 U. PITT. L. REV. 993, 1053-1054 (1994) (concluding that some of the legal problems in cyberspace are that the same that arise in real world, but others are new enough to require solutions tailored to the cyberspace).

supports her system is physically located. For instance, if a seller uses a fully automated and interactive web site to sell its products, her place of business would be the *situs* where the machine (often called “web server”³⁴) that “hosts” the web site is located. This approach, however, has its drawbacks and might create even more difficulties, as it will be explored in Part II.1.2.2.3.

Alternative (b) takes into account the potential of those technologies in permitting a party to reach virtually anybody in the world. Still considering the example of the seller who maintains a web site to sell its products, it is possible to say that this technology allows her to offer her products to anyone and anywhere, *just like if it had set up a real store in all the places where its web site is accessible*. Indeed, those e-commerce solutions are often called “virtual” stores, since they allow the buyer to buy goods and browse the seller’s offers like if she were physically inside a seller’s store without leaving the place where she is. In this line of reasoning, such a “virtual” store would be located, for legal purposes, in the place from where it is accessed by the buyer; in other words, the seller’s place of business would be wherever the buyer is. This position has not been adopted within the context of the CISG, but in another field of U.S. domestic law (general judicial jurisdiction³⁵) a similar construction has already been accepted³⁶ – despite of the critiques made against it³⁷. In fact, such a conclusion would lead to the exclusion of the great majority of those transactions from the sphere of application of the CISG: if the country of the seller’s place of business were the same as the buyer’s there would not be internationality under Article 1(1)³⁸.

³⁴ Usually, an e-commerce web server holds a database with information about the products (e.g. availability, price and other relevant information), and runs the applications necessary to make the web site operational.

³⁵ General *in personam* jurisdiction, as opposed to specific jurisdiction, is based on the contacts of the defendant with the forum state and allows the court to hear any claim against that defendant (not only claims related to the contacts with the forum); in general terms, if the defendant “does business” in the Forum State, there is general jurisdiction. In *Helicopteros Nacionales de Colombia, S.A v. Hall*, 466 U.S. 408, 414 (1984), the U.S. Supreme Court extended the due process test affirmed in *International Shoe Co. v. Washington*, 326 U.S. 310 (1945) for specific jurisdiction to a case of general jurisdiction, holding that “[d]ue process requirements are satisfied when in personam jurisdiction is asserted over a nonresident corporate defendant that has certain minimum contacts with [the forum] such that the maintenance of the suit does not offend traditional notions of fair play and substantial justice” (citations and internal quotation marks omitted); according to the court, “continuous and systematic general business contacts” are required, *Helicopteros*, 466 U.S. at 416. Some Circuit Courts found general “doing business” jurisdiction based on contacts with the forum State stemming from an interactive web store (see *infra* note 36).

³⁶ In *Gator.com Corp. v. L.L. Bean, Inc.*, 341 F.3d 1072 (9th Cir. 2003) vacated rehearing granted *en banc*, 366 F.3d 789 (9th Cir. 2004), the U.S. Court of Appeals for the 9th Circuit found that California Courts had general “doing business” jurisdiction over L.L. Bean, a seller of clothing and outdoor equipments which was not physically present in California, based on the fact that it did business in California through its “interactive” web site. Stating that general jurisdiction exists “when there are ‘substantial’ or ‘continuous and systematic’ contacts with the forum state, even if the cause of action is unrelated to those contacts”, the Court found general jurisdiction, among other reasons, because L.L. Bean’s web site “is clearly and deliberately structured to operate as a sophisticated virtual store in California”. *Id.* at 1076-78. The Court held that actual presence in the State is not required. *Id.* at 1079. Noting that “L.L. Bean’s web side is highly interactive and very extensive” and that “L.L. Bean ‘clearly does business over the Internet’”, the Court finally concluded that “L.L. Bean’s contacts with California were sufficient to confer general jurisdiction”. *Id.* at 1080. Although this decision seems to be highly questionable (see *infra* note 37), the same conclusion was reached by at least another court: see *Gorman v. Ameritrade Holding Corp.*, 293 F.3d 506, 512-13 (D.C. Cir. 2002). If those courts find that a defendant “does business” in their States through her web site, it is not impossible nor improbable that they use this kind of reasoning to hold that a seller who sells her products over the web has her place of business where her site is accessed, *i.e.* where the buyer is located.

³⁷ Indeed, the conclusion reached by the Court in *Gator.com* seems to be unsound, specially considering the risks it creates. In that aspect, see Robert J. Condlin, “Defendant Veto” or “Totality of the Circumstances”? *It’s Time for the Supreme Court to Straighten Out the Personal Jurisdiction Standard Once Again*, 54 CATH. U. L. REV. 53, 135 n.514 (2004) (noting that the *Ameritrade* rule “would permit a plaintiff to bring any kind of claim against a party in a state in which that party has an accessible interactive website, even if the claim has no connection with the state or the website” and, “[s]ince websites are usually accessible everywhere, this means that a defendant with an interactive website could be sued on anything, everywhere”).

³⁸ In fact, the only situation where internationality could be found would be when the buyer accessed the seller’s “virtual” store in a State different from the one where the buyer has her place of business.

Finally, alternative (c) basically disregards the fact that the transaction was concluded by electronic means and seeks to determine the place of business of the parties like in any other contract of sale. Among the four possibilities (*i.e.*, the “virtual” places of business rule, plus the three alternatives to determine the “real” place of business) here described, the last one seems to be in line with the CISG, as it is claimed in Parts II.1.2.2.2 and II.1.2.2.3 that follow.

II.1.2.2.2. Rejecting a “virtual” place of business

Acknowledging the existence of a “virtual” place of business is clearly incompatible with the CISG, unnecessary to achieve its purposes and in fact would exclude e-commerce from its sphere of application. The reason is because the CISG rule on direct applicability, *i.e.* Article 1(1)(a), relies extensively on territoriality: the Convention is applicable only if the places of business of the parties are *located* in different Contracting States. As a consequence, Article 1(1)(a) only works if the places of business of the parties are attached to a jurisdiction and, therefore, a “virtual” place of business, not linked to any territory, could never be the basis for direct applicability. Acknowledging the possibility of a “virtual” place of business, at least within the current framework of the CISG, would lead to the conclusion that the Convention is not directly applicable to electronic contracts of sale.

Furthermore, the definition of goods “as tangible movables” in the CISG (*see infra* Part II.2.2) suggests that, somewhere, even for a seller who operates based exclusively on the Internet, there must be a physical place from where the goods are dispatched and/or at least from where she coordinates her activities. Even in the extreme example of a seller who sells goods on her own name but only acts by directing third parties to deliver the goods to the buyer³⁹, there will certainly be someplace from where the seller will run her business. However, it should be noted that the technology permits even an individual to run such a business without the need of hiring staff or investing on premises to explore her activities and, thus, there might be no actual place of business; in this case, Article 10(b) will provide a solution: “if a party does not have a place of business, reference is to be made to his habitual residence”.

II.1.2.2.3. Finding the “real” place of business

To determine the “real” place of business, one has to bear in mind the requirements of *stability* and *autonomy* developed by CISG case-law⁴⁰ and the underlying idea of a “substantial and real

³⁹ In this example, whether the apparent seller is in fact a seller for CISG purposes (and not an agent of the party to whom he directs to deliver the goods to the buyer) is an issue governed by domestic law, not by the CISG. Therefore, the law applicable under the conflict of laws rules of the forum will determine who are the parties to the contract of sale. See Franco Ferrari, *supra* note 19, at 25-26. See also, *inter alia*, *Rheinland Versicherungen (Tribunale di Vigevano)*, *supra* note 16, at ¶ 23, Amtsgericht [Petty District Court] *Alsfeld*, Germany, 12 May 1995, Case Number 31 C 534/94, case abstract available at <<http://cisgw3.law.pace.edu/cases/950512g1.html>> (last visited Apr. 27, 2005); Oberster Gerichtshof [Supreme Court], Austria, 20 March 1997, Case Number 2 Ob 58/97m, case abstract available at <<http://cisgw3.law.pace.edu/cases/970320a3.html>> (last visited Apr. 27, 2005).

⁴⁰ See *supra* notes 20, 21, 22, 23, 24 and accompanying text.

connection” behind Article 10(a)⁴¹. Based on that, it is possible to conclude that the place where the computer system (server) is located is not by itself a place of business nor, even if it could be seen in a particular case as a place of business of one of the parties, the relevant one under Article 10(a). This place might be stable, but it does not necessarily have the required autonomous character.

Indeed, quite often those computer systems are physically installed in a location different from the parties’ places of business; there are several companies specializing in offering their own computer systems to host the applications necessary to run e-commerce solutions (“web site hosting”) or even to provide the infrastructure for computer systems owned by other companies (“co-location”)⁴². Since it is possible that the information system will be located in a place different from the one where a party carries on its activities, it must meet by itself the requirement of autonomy. However, it does not. Firstly, an information system certainly does not have autonomy to decide whether to close a deal or not; rather, it will issue offers or acceptances only if programmed to do so in the given circumstances. Secondly, the parties do not have to be physically close to the equipment: programming and transferring information to the server can be made remotely, without the need for continuous physical presence of the parties (*i.e.*, no need for an autonomous structure around the equipment); indeed, the place from where the information system is programmed might have the required autonomous character.

Therefore, the place where the parties’ servers are located is not relevant by itself⁴³. In fact, accepting such a definition could lead to additional problems, since it is not unusual for companies, particularly to transnational corporations, to have servers in different places and all of them might have a role in closing the transaction: for instance, one server might host the seller’s web site and another a database containing relevant information about her products and conditions for concluding a contract of sale⁴⁴.

Alternative (b) – the place where the party’s interactive automated system is accessible – is also incompatible with the concept of place of business in the CISG, since it does not meet the requirement of stability. It is merely transitory: it will last just for the time that the other party is accessing that system; after the parties conclude the contract such place will no longer exist (if it indeed existed in the first place).

There are at least two possible counter-arguments to this claim. The first is based on an analogy with a “real-world store”; for instance, if a buyer purchases goods in a seller’s store (*i.e.*, her place of business) and, the next day, the seller closes the store, this circumstance would not exclude stability; the same would be true with the place of business where the information system is accessed, which would “close” after the transaction is concluded. The second argument is that the buyer could “re-open” it again by re-accessing the seller’s information system. Those contentions, however, assume that one of the parties should be able to affect the stability of the other party’s

⁴¹ See *supra* note 27 and accompanying text.

⁴² For a list of the several different manners a company may put an information system on-line, including the two mentioned above, see Donald E. Biederman et al, *Interactive On-line Entertainment*, 647 PLI/PAT 263, 395-398 (2001).

⁴³ Accord Alessandra Zanobetti, *Contract Law in Electronic Commerce*, 2000 INT’L BUS. L.J. 533, 546, n.5 (2000) (stating that “the location where the server lies, and thus where the data are recorded, should not by itself have a legal effect with respect to the determination of [place of business]”).

⁴⁴ See *supra* note 34.

place of business; the conduct of one of the parties should be relevant to determine only its own place of business, not the other party's place of business. Adopting such a conclusion would lead, for instance, to the awkward situation where a seller could have different places of business for an identical transaction made with different buyers. In respect to the first argument, the analogy is flawed: a "real-world" store that closes in the next day is stable prior to the conclusion of the sales contract, in contrast to the "place of business where the information system is accessible", which is "opened" for one transaction and "closed" at the same time that the transaction is made.

It is accepted among scholars that "places of temporary sojourn cannot be considered 'places of business'", and, thus, "one cannot consider conference centers housing exhibitions or hotels or rented offices at exhibitions as being places of business under the CISG"⁴⁵. Although in those temporary exhibitions a contract of sale might be concluded, the locations where they are held are not accepted as places of business under Article 1 of the Convention. The situation is analogous to e-commerce, which is also a means to bring prospective sellers and buyers together and overcome the difficulties of dealing by distance. Finally, even if the place from where the computer system is accessed were deemed to be a place of business, it would certainly not be the one with the closest relationship to the contract and its performance⁴⁶, for one simple reason: the place where the buyer ("A") is accessing the seller's ("B") information system would determine B's place of business as being where A is located, even though B will certainly perform the contract from some place else, not "inside" A's place of business.

These two approaches were also rejected by the European Union, which adopted in the e-commerce context the traditional definition of "establishment" set forth by the European Court of Justice case-law, which requires "actual pursuit of an economic activity through a fixed establishment for an indefinite period"⁴⁷; they were also rejected by the UNCITRAL Working Group on Electronic Commerce, in the negotiations of the Draft UNCITRAL Convention on the Use of Electronic Communications in International Contracts⁴⁸. In respect to the CISG, it has already been suggested that it is desirable to have only one place of business regardless of the

⁴⁵ Franco Ferrari, *supra* note 19, at 28. See also John O. Honnold, UNIFORM LAW FOR INTERNATIONAL SALES UNDER THE 1980 UNITED NATIONS CONVENTION § 43, 32-34 (Kluwer Law, The Hague, 3d ed. 1999), available at <<http://cisgw3.law.pace.edu/cisg/biblio/honnold.html>> (last visited Apr. 16, 2005); Allison E. Butler, *Interpretation of 'Place of Business': Comparison between Provisions of the CISG (Article 10) and the Counterpart Provisions of the PECL*, 6 VINDOBONA J. 275, 276, n.7 (2002).

⁴⁶ For the criterion of Article 10(a), see *supra* note 25 and accompanying text.

⁴⁷ See Council Directive 2000/31, Recital 19, 2000 O.J. (L 178) 1. In the 19th recital, the directive provides that "[t]he place at which an "information society service provider" is established should be determined in conformity with the case-law of the Court of Justice", i.e., where there is "actual pursuit of an economic activity through a fixed establishment for an indefinite period". The directive further specifies what is not to be considered as place of establishment: "the place of establishment of a company providing services via an Internet website is not the place at which the technology supporting its website is located or the place at which its website is accessible". For a comment on the 19th recital of the directive, see Saul Litvinoff, *The European Union and Electronic Commerce*, 62 LA. L. REV. 1211, 1222-23 (2002). The European Court of Justice defined "establishment" in cases dealing with the right of establishment set forth in Article 43 (ex 52) *et seq* of the European Community Treaty. See *The Queen v. Secretary of State for Transport, ex parte Factortame Ltd and others* ["Factortame II"], Case C-221/89, [1991] E.C.R. 3905, ¶ 20; *Commission of the European Communities v. United Kingdom of Great Britain and Northern Ireland*, Case C-246/89, [1991] E.C.R. 4585, ¶ 21.

⁴⁸ See *Annex to the Report of the Working Group on Electronic Commerce on the work of its forty-fourth session (Vienna, 11-22 October 2004)*, UNCITRAL, 44th Sess. at 48, U.N. Doc. A/CN.9/571 (2004), also available at <http://www.uncitral.org/english/workinggroups/wg_ec/index.htm> (last visited Mar. 31, 2005) [hereinafter "UNCITRAL Draft Convention on Electronic Communications"]. Article 6(4) so far provides: "A location is not a place of business merely because that is: (a) where equipment and technology supporting an information system used by a party in connection with the formation of a contract are located; or (b) where the information system may be accessed by other parties".

means used to the conclusion of the contract, electronic or the more traditional ones⁴⁹, an inconvenience that the two approaches analyzed above certainly create. In fact, it seems that none of these solutions would be compatible with the CISG; what is left is the traditional approach.

The definition of place of business in e-commerce, like in any other transaction, should be made on a case-by-case basis. The abovementioned requirements of *autonomous character* and *stability* must be met; if more than one place meet those requirements, relevant one will be determined in accordance with the idea of substantial and real connection that underlies Article 10(a). Therefore, it is possible to state that the place of business of a party will be where she pursues her economic activity on a permanent basis and where there is autonomy to conclude the sales contract. One should nevertheless bear in mind that, (a) in e-commerce, autonomy might be construed as the ability to determine in advance the conditions under which it will issue offers and/or acceptances by programming a server or other information system, even remotely. Also, if there is more than one possible place of business: (b) the relevant place of business is, under the principle that underlies Article 10(a), the one where there is activity that is more closely connected to the conclusion of contract and its performance, considering the elements known by the parties at the time of conclusion of the contract⁵⁰; (c) if the parties indicate where their places business is located, such indication should be accepted⁵¹.

Those elements will provide some guidance in the definition of place of business of the parties in each case, but it should be conceded that they might not lead to one clear answer in every case. However, this problem is not exclusive to contracts concluded by electronic means. There are multiple ways in which the parties can structure their activities. Numerous companies, in order to benefit from specialization in trade and from the comparative advantages that different countries have, perform their activities in different jurisdictions⁵²; for instance, it is not unusual for

⁴⁹ See UNCITRAL *e-Commerce WkG: Secretariat Note on e-Contracting and CISG*, *supra* note 18, at 5 (¶ 12) (stating that, if an approach based on a definition of place of business is adopted, “[s]uch a definition should of course not displace the generally-understood meaning of the notion of ‘place of business’ under the Convention, as developed in legal literature in the absence of a definition of ‘place of business’ and that “every effort should be made to avoid creating a situation where any given party would be considered as having its place of business in one country when contracting electronically and in another country when contracting by more traditional means”). See also Franco Ferrari, *supra* note 18, at 291.

⁵⁰ The idea that underlies the criterion set forth in Article 10(a) is of a “substantial or real connection” (see *supra* note 27 and accompanying text). Therefore, it is doubtful that the places where information regarding an electronic contract is recorded or where the application supporting the party’s information system is running could be considered by themselves relevant, even if one does not agree with the argument that those places do meet the requirement of autonomy. Furthermore, the place from where an information system is accessible might have a relation to the conclusion of the contract, but is certainly not connected to its performance; hence, even if one was to reject the claim that it cannot be a place of business due to the lack of stability and argue that it is indeed a place of business it will not be the relevant one under Article 10(a).

⁵¹ In respect to item (c) above, see UNCITRAL *e-Commerce WkG: Secretariat Note on e-Contracting and CISG*, *supra* note 18, at 4 (¶ 9) (stating that “[w]here the parties to a contract concluded electronically clearly indicate where their relevant place of business is located, that place of business is to be taken into consideration in determining the internationality of the sales transaction”). See also Franco Ferrari, *supra* note 18, at 290 and Article 6(1) of the UNCITRAL *Draft Convention on Electronic Communications*, *supra* note 48 at 47. In case one of the parties misrepresents the location of its place of business, it is not clear whether such issue would be governed by domestic law (i.e. if it would fall into the exclusion of validity issues under Article 4(a) of the CISG) or resolved by the CISG itself; the UNCITRAL *Draft Convention on Electronic Communications* solves the issue directly, when it provides in Article 6(1): “For the purposes of this Convention, a party’s place of business is presumed to be the location indicated by that party, unless another party demonstrates that the party making the indication does not have a place of business at that location”.

⁵² See Andreas F. Lowenfeld, *INTERNATIONAL ECONOMIC LAW 7* (Oxford University Press 2003) (2002) (noting, in an analysis of the shortcomings of David Ricardo’s theory of comparative advantage, that “the rise of multinational enterprises has led to vast amounts of trade among affiliated firms in different countries, and to international investment as an alternative and supplement to trade, to a degree wholly unforeseen by the economists who developed and explored theories of international trade”).

companies to coordinate their activities, design their products, manufacture, store and market them in completely different places. However, such movement is not directly related to the development of information technology tools (although they certainly turn those complex decentralization projects more feasible) and hence those issues arise regardless of the use of electronic means for the conclusion of the contract. The use of electronic means, however, brings additional problems in respect to the issue of awareness of the places of business (“apparent internationality”), as it will be examined subsequently in Part II.1.3.

It should be acknowledged that the definition of place of business might become more problematic in respect to those contracts that are concluded *and performed* by the seller through electronic means (e.g. acquisition and download of software over the Internet); however, since those kind of contracts are not covered by the CISG⁵³, that is not a real issue.

In fact, it does not seem that in a short term the elements of the concept of place of business will be modified, since the Draft Convention on the Use of Electronic Communications in International Contracts⁵⁴ defines it under Article 4(h) as “any place where a party maintains a nontransitory establishment to pursue an economic activity other than the temporary provision of goods or services out of a specific location”. Although inserted in a Draft Convention dealing specifically with the difficulties arising from electronic communications, this provision does not seem to take into account any particularity of electronic commerce in its definition of place of business.

II.1.3. The requirement of apparent internationality in Article 1(2)

In the domain of e-commerce, the distinction between domestic and international transactions tends to be blurred⁵⁵, due to the fact that is difficult to know where parties are when they are dealing on-line⁵⁶. Under CISG Article 1(2), the internationality of the transaction is to be disregarded if the fact that the parties have their places of business in different States “does not appear either from the contract or from any dealings between, or from information disclosed by, the parties at any time before or at the conclusion of the contract”. The parties must have had the opportunity to be aware that the transaction is indeed international; if one of them had a basis to

⁵³ See *infra*, Part II.2.2.

⁵⁴ See UNCITRAL Draft Convention on Electronic Communications, *supra* note 48 at 47. Two important observations should be made: (a) although the Draft Convention crystallizes the requirement of stability (or “nontransitory” establishment), it does not mention the requirement of autonomous character which was developed by legal scholarship and case-law on the CISG; (b) under Article 19(1), the Draft Convention is intended to be applicable to the “use of electronic means in connection with the formation or performance of a contract or agreement” to which the CISG (and other conventions) is applicable; the provision seems to limit the applicability of the Draft Convention to issues of formation and performance and, thus, it is possible to construe it as not being applicable to issues of applicability of the CISG; anyway, it seems that such impact over the CISG would be possible only if the Draft Convention is ratified by all Contracting States to the CISG.

⁵⁵ See UNCITRAL e-Commerce WkG: Secretariat Note on e-Contracting and CISG, *supra* note 18, at 4 (¶ 8); Franco Ferrari, *supra* note 18, at 289; Renaud Sorieul, *The United Nations Convention on Contracts for the International Sale of Goods (CISG) as a Set of Uniform Rules for Electronic Commerce*, 4 BUS. L. INT’L 380, 381 (2000).

⁵⁶ See John D. Gregory, *The Proposed UNCITRAL Convention on Electronic Contracts*, 59 BUS. LAW. 313, 319 (2003) (reporting the argument of those who supported the idea of making the proposed Convention applicable to both domestic and international transactions and noting that this difficulty is more significant when the parties are dealing with “goods that are deliverable online”).

rely on the domestic setting⁵⁷ of their dealings, the Convention is not applicable. The underlying principle is to prevent that one of the parties be surprised by the applicability of the Convention, as it is evidenced by the example given during the United Nations Conference that led to the final text of the CISG; according to the Secretariat Commentary, the Convention would not be applicable under Article 1(2) “where the parties appeared to have their places of business in the same State but one of the parties was acting as the agent for an undisclosed foreign principal”⁵⁸.

Although some technologies allow the parties to negotiate from completely different parts of the world as easily as if they were in the same country, it should be noted that in many instances the parties will probably be compelled to consider at a certain point of their dealings the distance between them. That is so due to the fact that the CISG only covers contracts of sale of *tangible* goods, which will generally require transport from one location to another⁵⁹. For instance, the buyer, even if not being advised by legal counsel and not concerned about the law applicable to the contract, will certainly consider the freight costs and possibly customs duties, since the goods will be imported from one country to another; conversely, if the seller has to arrange for the carriage of the goods, she will certainly have to know to where the goods should be transported⁶⁰. In other situations where the internationality of the contract was not part of the negotiation of the parties, other elements might be considered to determine whether the requirements of Article 1(2) were met.

In electronic commerce, it has been suggested that, when the parties communicate with each other using an Internet domain name⁶¹ (either by e-mail or through an web site) that is attached to a particular jurisdiction – such as the names with the suffixes “.de”, “.it” and “.ar”, which stand for Germany, Italy and Argentina, respectively – this element might be taken into account to determine the parties’ places of business⁶². However, such domain names do not create a presumption that the parties have their places of business in the jurisdictions mentioned in the name; rather, it can only be one of the factors considered to assist in determining whether the parties had conditions to be aware of the internationality of the contract, but it cannot be used by itself as a criterion of internationality⁶³. The reason is that one of the parties might be using one

⁵⁷ See Franco Ferrari, *supra* note 19, at 31.

⁵⁸ See *Secretariat Commentary* [on Article 1 of the 1978 Draft], *United Nations Conference on Contracts for the International Sale of Goods*, OFFICIAL RECORDS: DOCUMENTS OF THE CONFERENCE AND SUMMARY RECORDS OF THE PLENARY MEETINGS AND OF THE MEETINGS OF THE MAIN COMMITTEES (VIENNA, 10 MARCH - 11 APRIL 1980) 14, 15 (1981), available at <<http://cisgw3.law.pace.edu/cisg/text/secomm/secomm-01.html>> (last visited Apr. 2, 2005) and in *DOCUMENTARY HISTORY OF THE UNIFORM LAW FOR INTERNATIONAL SALES 405* (John O. Honnold ed. 1989).

⁵⁹ See discussion in Part II.2.2. If the CISG covered contracts performed by electronic means, then the parties would probably be able to completely disregard each other’s place of business.

⁶⁰ That is the situation described in Article 31(a) of the CISG. In the circumstances referred to in Articles 31(b) and 31(c), it would be reasonable for the seller to rely on the domestic setting of the transaction.

⁶¹ Domain name is an instrument used to make easier to find a resource in the Internet; instead of typing the IP Address (a number such as “192.168.100.100”) of the server where the desired resource is located, a user can simply use the domain name (such as “www.nyu.edu”), which is more friendly.

⁶² See *UNCITRAL e-Commerce WkG: Secretariat Note on e-Contracting and CISG*, *supra* note 18, at 4 (¶ 10) (stating that “[w]here a party uses an address linked to a domain name connected to a specific country (such as addresses ending with ‘.at’ for Austria, ‘.nz’ for New Zealand, etc.), it can be argued that the place of business should be located in that country”). See also Franco Ferrari, *supra* note 18, at 290.

⁶³ That is the solution so far adopted in the *UNCITRAL Draft Convention on Electronic Communications*, *supra* note 48 at 48. Article 6(5) provides that “[t]he sole fact that a party makes use of a domain name or electronic mail address connected to a specific country does not create a presumption that its place of business is located in that country”. According to UNCITRAL Working Group on Electronic Commerce, nothing in the draft paragraph (5) of Article 6 “prevented a court or arbitrator from taking into

of those domain names without being necessarily in the territory referred to in the suffix. Suppose, for instance, that an Italian buyer negotiates by e-mail a contract of sale with an Italian subsidiary of a German company; the contract is concluded and fully performed by the Italian subsidiary, without any involvement of the parent company, except that the seller used the e-mail system of its parent company and, consequently, the German domain name (".de"). It would be clearly unreasonable to assume that such transaction is international, just because of the domain names of the parties. Also, since Article 1(2) requires possibility of being aware, it is possible that one of the parties might not have conditions to notice the suffixes of the domain names – for instance, if, while browsing a web site with a domestic domain name, she is forwarded to another one with a foreign domain name without having the possibility of noticing that (e.g., the new web site is loaded on a window which does not display the address of the page being viewed). There is still the possibility that one of the parties does not know to what the suffix of the domain name stands for. Finally, a domain name based rule would not work for top-level domain names (such as ".com" and ".net"), which do not have geographical suffixes.⁶⁴

II.1.4. The definition of parties and the issue of "electronic agents"

When technologies are used to replace human interaction in the formation of contracts, one might wonder who (or what) is party to the contract: the person that programmed (or entity on whose behalf a person programmed) the computer to issue an offer or acceptance on that particular circumstance, or the "electronic agent" who issued the declarations that ultimately formed the contract? Although the answer of who *should* be a party to that contract seems to be obvious, this issue is not settled by the CISG and, thus, is left to domestic law⁶⁵. Nevertheless, when the issue of electronic agents was discussed by the UNCITRAL Working Group of Electronic Commerce, it has been generally admitted that "a computer should not become the subject of any right or obligation"⁶⁶. Indeed, the UNCITRAL Model Law on Electronic Commerce defines "originator" and "addressee" of data messages as *persons*, and the Guide to Enactment indicates that "the Model Law should not be misinterpreted as allowing for a computer to be made the subject of rights and obligations"⁶⁷. Although any other view would be unreasonable, that matter is left to domestic law.

account the assignment of a domain name as a possible element, among others, to determine a party's location, where appropriate", *Report of the Working Group on Electronic Commerce on the work of its forty-fourth session (Vienna, 11-22 October 2004)*, UNCITRAL, 44th Sess. at 47 (¶ 113), U.N. Doc. A/CN.9/571 (2004), also available at <http://www.uncitral.org/english/workinggroups/wg_ec/index.htm> (last visited Mar. 31, 2005).

⁶⁴ For a discussion of this problem, see UNCITRAL e-Commerce WkG: *Secretariat Note on e-Contracting and CISG*, *supra* note 18, at 4-5 (¶ 11); Franco Ferrari, *supra* note 18, at 290-91 (both discussing the possibility of considering that the party who deals with someone using a top-level domain name could not say that she was not aware of the internationality of the transaction). See also *Report, UNCITRAL Working Group on Electronic Commerce*, 34th Sess. at 19-20 (¶ 98-9), U.N. Doc. A/CN.9/484 (2001), available at <<http://www.uncitral.org/english/sessions/unc/unc-34/acn-484e.pdf>> (last visited Apr. 3, 2005) [hereinafter "UNCITRAL e-Commerce WkG: 38th Session Report"]. One inconvenience of this approach, however, is the fact that most U.S. companies use top-level domain names, even though some of them do not deal internationally. Also, it is conceded that this approach only serves to the purpose of determination of apparent internationality; thus, another solution would be necessary for purposes of applicability under Article 1(1)(a), which requires that the parties have their places of business in a particular jurisdiction.

⁶⁵ The CISG is not intended to deal with the law of agency; for references of that issue, see *supra* note 39.

⁶⁶ See Renaud Sorieul, *supra* note 55, at 383 (concluding that the party on "whose behalf a computer is programmed, for example to issue purchase orders, is ultimately responsible for any message generated by the machine").

⁶⁷ See Articles 2(c) and 2(d) of the UNCITRAL Model Law on Electronic Commerce and ¶ 35 of the Guide to Enactment, G.A. Res. 51/162, U.N. GAOR, 51st Sess., U.N. Doc. A/RES/51/162 (1996), English version available at <<http://www.uncitral.org/english/texts/electcom/ml-ecomm.htm>> (last visited Apr. 3, 2005) [hereinafter "UNCITRAL MLEC"].

II.2. Substantive Sphere of Application and E-Commerce

II.2.1. Overview and potential issues

Articles 1(1), 2 and 3 set the limits of the Convention's *ratione materiæ* sphere of application. In order to be governed by the CISG, the contract between the parties must be a *contract of sale of goods*⁶⁸, as Article 1(1) provides⁶⁹. Therefore, the applicability of the Uniform Sales Law requires a definition of *contract of sale* and *goods*, concepts that might pose some difficulties in some instances of electronic commerce, as it will be further explored in Part II.2.2.

Furthermore, Article 2 of the Convention excludes its applicability to some contracts, based on the (consumer) purpose of the sale (subparagraph (a)), method of selling (subparagraph (b)), the existence of public (national) interest in the sale (subparagraph (c)) or the nature of the goods sold (subparagraphs (d), (e) and (f)). Within the scope of this paper, the exclusion of contracts of sale for consumer purposes is relevant. Article 2(a) requires that the seller knew (or ought to have known) of the consumer use of the goods sold in order to exclude the application of the Convention. Such knowledge requirement for non-applicability, which already creates some problems in regular real-world transactions, poses additional difficulties when the contract is made with the use of electronic means, an issue which will be dealt with in Part II.2.3. Article 3, although relevant for the definition of the CISG's sphere of application, does not create any additional difficulties within the e-commerce environment⁷⁰.

II.2.2. "Goods", "contract of sale" and performance over the Internet

There is some discussion on whether transactions involving software and other creations recorded in tangible media (or transmitted by electronic means) are covered by the CISG. Such controversy arises due to the intangible nature of those creations (although they are often recorded in tangible media) and to the kind of agreement generally used in those transactions. The difficulty resides on the notions of *goods* and *contract of sale*, which are not expressly defined in the CISG.

II.2.2.1. Basic concepts: "goods" and "contract of sale"

The CISG does not define in express terms the expressions "goods" and "contract of sale". Nevertheless, it is generally said that an autonomous definition can be derived from the CISG without recourse to domestic law⁷¹. Goods are usually defined as "tangible movables"; although the text of Article 30 suggests that goods ought to be movable⁷², the tangibility requirement is based on the drafting history of the Convention. The argument is that the notion of "goods"

⁶⁸ For a comprehensive analysis of the CISG's substantive sphere of application, see Franco Ferrari, *supra* note 19, at 58-95.

⁶⁹ CISG Article 1(1) provides, in the relevant part: "[t]his Convention applies to *contracts of sale of goods* [...]"

⁷⁰ CISG Article 3 presents the threshold requirements for the exclusion of contracts for the supply of goods to be manufactured or produced (Article 3(1)) and contracts which involve the supply of both goods and services (Article 3(2)). On that issue, see Franco Ferrari, *supra* note 19, at 65-74.

⁷¹ Several commentators and courts sought to define goods autonomously; for references, see *infra* notes 72, 74 and 75.

⁷² See Frank Diedrich, *The CISG and Computer Software Revisited*, 6 VINDOBONA J. SUPPLEMENT 55, 59 (2002), available at <http://www.maa.net/vindobonajournal/vj_documents/vj_6_2_e_supplement_diedrich.pdf> (last visited Apr. 6, 2005).

under the CISG corresponds to the one under the 1964 Hague Conventions⁷³; such conclusion is based on the fact that the English version of the three texts (ULIS, ULF and CISG) uses the expression “goods”, while the French version of the CISG (which is also official) uses the expression “*merchandises*” in contrast to the expression “*objets mobiliers corporels*” used in the ULIS and ULF; this difference in terms is deemed to be merely a terminological simplification from the Hague Conventions to the CISG and was not intended to be an evolution; therefore, it is possible to say that the notion of “tangible movables” present in the Hague Conventions (from the French text “*objets mobiliers corporels*”) was transposed to the CISG⁷⁴. Some courts have already interpreted Article 1 of the CISG to conclude that only “tangible moveable” goods are covered by the CISG⁷⁵.

On the other hand, the definition of contract of sale is derived from the text of the CISG, more specifically, from provisions of the CISG describing the obligations of the parties (Articles 30 and 53)⁷⁶. Under Article 30, “[t]he seller must deliver the goods, hand over any documents relating to them and transfer the property in the goods”; conversely, under Article 53, “[t]he buyer must pay the price for the goods and take delivery of them”. Having said that, the conclusion is that a sales contract “obliges one party (seller) to deliver goods and transfer the right of property, and the other party (buyer) to pay the purchase price and accept delivery”; the underlying idea is “an

⁷³ See Convention relating to a Uniform Law on the International Sale of Goods, Jul. 1, 1964, 834 U.N.T.S. 107, available at <<http://www.unidroit.org/english/conventions/c-ulis.htm>> (last visited Apr. 6, 2005) [hereinafter “ULIS”] and Convention relating to a Uniform Law on the Formation of Contracts for the International Sale of Goods, Jul. 1, 1964, 834 U.N.T.S. 169, available at <<http://www.unidroit.org/english/conventions/c-ulf.htm>> (last visited Apr. 6, 2005) [hereinafter “ULF”].

⁷⁴ For this construction, see Franco Ferrari, *Specific Topics of the CISG in the light of Judicial Application and Scholarly Writing*, 15 J.L. & COM. 1, 64-65 (1995). Also using an historical approach to reach the same conclusion, see Peter Winship, *Changing Contract Practices in the Light of the United Nations Sales Convention: A Guide for Practitioners*, 29 INT’L LAW. 525, 533 (1995), available at <<http://cisgw3.law.pace.edu/cisg/text/winship1.html>> (last visited Apr. 3, 2005). But see Frank Diedrich, *supra* note 72, at 64 (stating that “[n]o reason can be derived from the CISG to limit its sphere of application to tangible things”); Joseph Lookofsky, *The 1980 United Nations Convention on Contracts for the International Sale of Goods*, in INTERNATIONAL ENCYCLOPAEDIA OF LAWS: CONTRACTS [SUPPLEMENT 29] ¶ 58 (Roger Blanpain ed., Kluwer Law International, 2000) (stating that “there is good reason to understand the CISG notion as broadly as possible, so as to cover all moveable – and not just ‘corporeal’ – things”).

⁷⁵ See *Al Palazzo S.r.l. v. Bernardaud S.A.*, Tribunale [District Court] di Rimini, 26 November 2002, 8 VINDOBONA J. 165, 171 (2004), available at <<http://cisgw3.law.pace.edu/cases/021126i3.html>> (last visited Apr. 9, 2005) (stating that the CISG requires that “the object of the sale, at the moment of delivery [...] be moveable and tangible”); *Kantonsgericht [District Court] des Kantons Zug*, Switzerland, 21 October 1999, Case Number A3 1997 61, available at <<http://cisgw3.law.pace.edu/cases/991021s1.html>> (last visited Apr. 9, 2005) (stating that the CISG is “applicable only to movable property and to legal transactions where goods are exchanged for money”); *Oberster Gerichtshof [Supreme Court]*, Austria, 10 November 1994, Case Number 2 Ob 547/93, 6 VINDOBONA J. 147, 150 (2002), also available at <<http://cisgw3.law.pace.edu/cases/941110a3.html>> (last visited Apr. 17, 2005); (stating that “[g]oods’ means moveable property”); *Oberlandesgericht [Provincial Court of Appeal] Köln*, Germany, 26 August 1994, Case Number 19 U 282/93, available at <<http://cisgw3.law.pace.edu/cases/940826g1.html>> (last visited Apr. 9, 2005) (finding that a contract to perform a market study was not covered by the CISG and holding that “[o]nly movable things that are typically the object of a commercial sale can be considered a ‘Ware [good, in German]”).

⁷⁶ See *Soc. Romay AG v. Soc. Behr France, S.a.r.l.*, Tribunal de Grande Instance de Colmar, France, 18 December 1997, available at <<http://www.unilex.info/case.cfm?pid=1&do=case&id=981&step=FullText>> (finding the CISG inapplicable and stating that “[l]a Convention ne contient aucune définition expresse du contrat de vente internationale”, but that “[l]es éléments de définition peuvent être tirés de certains articles de la Convention, consacrés aux obligations des parties”), vacated by *Cour d’Appel de Colmar*, France, 12 June 2001, available at <<http://cisgw3.law.pace.edu/cases/010612f1.html>> (last visited Apr. 9, 2005) (stating the same, but finding the CISG applicable), affirmed by *Cour de Cassation*, France, 30 June 2004, Case Number Y 01-15.964 available at <<http://www.unilex.info/case.cfm?pid=1&do=case&id=981&step=FullText>> (last visited Apr. 9, 2005); *Al Palazzo supra* note 75, at 171 (stating that a definition of contract of sale “can be derived from Articles 30 and 53 of the CISG”); *Tribunal [Appellate Court] Cantonal Vaud*, Switzerland, 11 March 1996, Case Number 01 93 1061, available at <<http://cisgw3.law.pace.edu/cases/960311s2.html>> (last visited Apr. 9, 2005) (stating that “[t]he Vienna Convention gives no definition of the sales contract which must be understood in its classic sense, namely, that one party undertakes an obligation to deliver goods and transfer the property in the goods to the other party for a certain price”).

exchange [of] ‘goods for money’”⁷⁷. For the purposes of this paper, the critical issue in the definition of sales contract is the obligation of the seller of transferring the property in the goods.

II.2.2.2. Unsuitability of the definitions to contracts performed over the Internet

Aside from permitting the conclusion of a contract by electronic means, the technological developments now also allow the parties to *perform* their contractual obligations electronically. Both the buyer and the seller can perform their obligations over the Internet: the “buyer” can pay the price electronically, whereas the “seller” can, depending on the object of the contract of sale, provide it to the “buyer” by electronic means. If the *characteristic* performance of the contract is made electronically, the applicability of the CISG becomes doubtful⁷⁸.

The most notorious example is the situation where a developer offers her software in a web site, a user purchases a license to use it, pays for it on-line (e.g. by credit card) and downloads it directly to her computer⁷⁹. The software is not recorded on tangible media and shipped to the user, but transferred from one computer to another, where it is ultimately recorded, to be used and eventually for backup purposes. There are other sorts of digital content that are also suitable for being licensed and transferred electronically, such as music, images, video and texts (the so called “e-books”); from the perspective of the technology, the scheme used is very similar to the one adopted to license downloadable software, although sometimes the user is not allowed to retain a copy (i.e., the content is simply broadcasted over the Internet).⁸⁰

There is significant discussion among commentators in respect to the applicability of the CISG to software contracts. There is a consensus that the CISG can be applicable to *standard* software – i.e., software that is sold *en masse* “as it is” to the public – and *system* software – i.e., software that is included in another good (such as a computer or an automobile) to make it operational⁸¹. In respect to custom-made software, i.e. the software that is designed or modified specifically for one client, it is consensus that the CISG will not apply if “the preponderant part of the obligations of the party who furnishes the goods consists in the supply of labour or other services” (Article 3(2)); therefore, if the economic value of the obligation of customizing (labor) the software exceeds 50%

⁷⁷ Oberster Gerichtshof, *supra* note 75, at 150.

⁷⁸ This Part will deal only with the situation where the characteristic performance is made through electronic means. Any reference in this paper to “contracts performed over the Internet” or “contracts performed electronically” is to be read as references to contracts whose *characteristic* performance is made through electronic means; payment of the price, in most contracts and in any contract of sale, is not deemed to be characteristic performance.

⁷⁹ See Trevor Cox, *Chaos versus Uniformity: The Divergent Views of Software in the International Community*, 4 VINDOBONA J. 3, 3 (2000) (stating that “[s]oftware can be delivered via the Internet (electronic software), mass-produced and delivered on a disk, or custom designed for a particular party”).

⁸⁰ It has already been said that on-line broadcasts would clearly fall into the category of services, and, thus, not be covered by the CISG; see UNCITRAL *e-Commerce WkG: 38th Session Report*, *supra* note 64, at 23 (¶ 117).

⁸¹ See Frank Diedrich, *supra* note 72, at 65 (stating that “the CISG is certainly applicable to system software and standard software”). For references to court decisions holding the CISG applicable to contracts of sale of standard software and system software, see *infra* note 83.

of the total value of the contract, the CISG will not be applicable⁸². Based on that, courts have already held that the CISG is applicable to standard software and system software.⁸³

However, there is still controversy among commentators in respect to the applicability of the CISG to software that is not incorporated in tangible media, such as the one downloaded over the Internet. In general, those who believe that the expression “goods” must have a broad definition believe that the CISG covers intangibles and, as corollary, downloaded software⁸⁴; however, if the requirement of tangibility is maintained, the CISG is not applicable to downloaded software⁸⁵, or to any other digital content transmitted electronically.

Aside from the issue of tangibility, the claim to exclude contracts performed over the Internet is stronger when one considers that, when there is no tangible media, only the limited right to use the software (or other digital content) is transferred. Therefore, one of the elements of the definition of the contract of sale – transfer of title in the goods – is absent: the developer maintains his Intellectual Property (“IP”) rights over the software and grants a limited IP right to the user. In this situation, the transaction looks “less like a sale and more like a license”⁸⁶; usually the licensor, through standard-form contracts, seeks not only to limit her liabilities, but govern the use of the software by the licensee⁸⁷, limiting what the latter can do with the computer program. When the transaction involves a copyrightable creation incorporated in tangible media (such as books⁸⁸, optical discs, magnetic discs), there is at least a transfer of the property in the media used

⁸² It is generally accepted that the term “preponderant” in Article 3(2) should be read as “more than half” and that the basis to determine “preponderance” is the economic value of the obligations. In that respect, see Peter Schlechtriem, UNIFORM SALES LAW: THE UN-CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS 31-32 (Vienna, Manz, 1986), available at <<http://www.cisg.law.pace.edu/cisg/biblio/schlechtriem.html>> (last visited Apr. 17, 2005); Franco Ferrari, *supra* note 19, at 71-73. But see CISG-AC Opinion Number 4, *Contracts for the Sale of Goods to Be Manufactured or Produced and Mixed Contracts (Article 3 CISG)*, ¶ 3.3 and 3.4, 24 October 2004 (Rapporteur: Professor Pilar Perales Viscasillas, Universidad Carlos III de Madrid), available at <<http://cisgw3.law.pace.edu/cisg/CISG-AC-op4.html>> (last visited Apr. 9, 2005) (accepting the economic value approach, but stating that preponderance should be determined based on “overall assessment”, not on fixed percentages).

⁸³ See *Landgericht* [District Court] München, Germany, 8 February 1995, Case Number 8 HKO 24667/93, available at <<http://cisgw3.law.pace.edu/cases/950208g4.html>> (last visited Apr. 9, 2005) (standard software); *Handelsgericht* [Commercial Court] Zürich, Switzerland, 17 February 2000, Case Number HG 980472, available at <<http://cisgw3.law.pace.edu/cases/000217s1.html>> (last visited Apr. 9, 2005) (holding the CISG applicable to a contract of supply of standard software, hardware, installation and training; disregarding, for purpose of applicability, the part of the contract which involved the supply of services, although incorrectly based on Article 3(1)); *Oberlandesgericht* [Provincial Court of Appeal] Koblenz, Germany, 17 September 1993, Case Number 2 U 1230/91, available at <<http://cisgw3.law.pace.edu/cases/930917g1.html>> (last visited Apr. 9, 2005) (system software embedded in a computer chip).

⁸⁴ Trevor Cox, *supra* note 79, at 9 (concluding that there are valid arguments for applying the CISG to software downloaded over the Internet); Frank Diedrich, *Maintaining Uniformity in International Uniform Law Via Autonomous Interpretation: Software Contracts and the CISG*, 8 PACE INT’L L. REV. 303, 336 (1996), available at <<http://cisgw3.law.pace.edu/cisg/biblio/Diedrich.html>> (last visited Apr. 9, 2005) (concluding that “the substantive sphere of application of the CISG extends to all international sales contracts despite [...] whether the software is transmitted electronically or by means of a tangible data carrier”).

⁸⁵ See UNCITRAL e-Commerce WkG: Secretariat Note on e-Contracting and CISG, *supra* note 18, at 7 (¶ 22); Franco Ferrari, *supra* note 18, at 294.

⁸⁶ See John D. Gregory, *supra* note 56, at 322.

⁸⁷ See Jeff C. Dodd, *Time and Assent in the Formation of Information Contracts: the Mischief of Applying Article 2 to Information Contracts*, 36 HOUS. L. REV. 195, 211 (1999).

⁸⁸ There is at least one decision holding the CISG applicable to the sale of books: *Handelsgericht* [Commercial Court] Zürich, Switzerland, 10 February 1999, Case Number HG 970238.1, available at <<http://cisgw3.law.pace.edu/cases/990210s1.html>> (last visited Apr. 10, 2005).

as a data carrier, something that does not happen when digital content is transferred over the Internet⁸⁹.

Therefore, based on the current interpretation of Article 1(1) of the CISG, the Convention would not be applicable to contracts where the characteristic performance is done electronically. However, this conclusion is based exclusively on a mere interpretation of the provisions in the CISG and, thus, it poses a new issue: whether this interpretation that restricts the applicability of the Convention should nevertheless be maintained despite the technological developments; *i.e.*, whether the interpretation should also be updated or not to meet the current reality needs.

II.2.2.3. A critical analysis of the notion of “goods” as tangibles: can it be “updated”?

From the perspective of the Law of the Treaties, the construction of the concept of “goods” as covering only tangibles does not seem fully persuasive. Under the Vienna Convention, the “extrinsic materials” mentioned in Article 32 – *i.e.* “those which have not been the object of the specific agreement of the parties, such as the preparatory work of the treaty and the circumstances of its conclusion” – are qualified as “supplementary means of interpretation” in relation to “intrinsic materials” – *i.e.*, “texts and related instruments which have been agreed to by the parties”⁹⁰. As described above in Part II.2.2.1, the construction of the term “goods” is based on a historical analysis (*i.e.*, on “extrinsic materials”) whose starting point is the Hague Conventions, which were adopted by a few States (basically European), in radical contrast to the CISG, which has almost universal acceptance⁹¹. A claim to extend a definition included in an earlier treaty with limited adhesion to a later treaty with wider acceptance is weaker than in the situation where all the States who participated in the formation of the second treaty also negotiated the first one; further, the claim to use elements outside the bargain reached by the contracting states is also weaker when the second treaty remains open to signature and is indeed adopted by other States. Indeed, in the context of the CISG, relying exclusively on an historical interpretation would be tantamount to accept that the negotiations of the Hague Conventions could bind the original signatories of the CISG without their consent, as well as later signatories who did not even participate in the negotiation of the CISG itself.

Those circumstances make a claim for interpretation based on purpose (teleological) and context (systematic) stronger. Since the issue is the applicability of a Convention, automatically favoring an interpretation to expand the “CISG as broadly as possible”⁹² does not seem correct. An interpretation based on purpose suggests that, at least when it comes to determine the sphere of application of the Convention, the matter should be solved on the basis of the suitability of the

⁸⁹ But see Joseph Lookofsky, *In Dubio Pro Conventione? Some Thoughts about Opt-Outs, Computer Programs and Preemption under the 1980 Vienna Sales Convention (CISG)*, 13 DUKE J. COMP. & INT'L L. 263, 277-278, n.76 (Summer 2003) (arguing that “the fact that [the buyer] can only (legally) use the goods purchased in ways which respect [the seller]’s intellectual property rights in the software does not somehow turn a sale into a license, and if [the seller] supplies a term which attempts to escape the reality of the situation, that term ought not bind [the buyer]”).

⁹⁰ See Eduardo Jiménez de Aréchaga, *International law in the past third of a century*, 159 REC. DES COURS 1, 42-48 (1978-I).

⁹¹ For an updated listed of contracting states, see: (a) ULIS, <<http://www.unidroit.org/english/implement/i-64ulis.pdf>> (last visited Apr. 10, 2005); (b) ULF, <<http://www.unidroit.org/english/implement/i-64ulf.pdf>> (last visited Apr. 10, 2005); and (c) CISG, *supra* note 2.

⁹² Joseph Lookofsky, *supra* note 74, at ¶ 58.

CISG to govern contracts performed by electronic means; the basic idea is: had the drafters discussed the matter, would they extend the applicability of the CISG to those contracts? Although the provisions regarding the formation of contracts (Articles 14-24, to be explored in Part III.2) might provide a good framework to those contracts, that is not clear in respect to the ones concerning obligations of the parties (Articles 25-88)⁹³, which often assume that goods are tangible⁹⁴. However, a more comprehensive analysis would be necessary to examine whether these provisions are indeed suitable to the transactions at hand.

Regardless of that, in order to be a efficient set of default rules for transactions involving intangibles, the CISG would require rules defining the extent of the duty of the buyer to transfer property; otherwise, in the absence of contract, one could find that a transaction involving software would, for instance, give the licensee the right to copy or resale it freely under Article 30 of the CISG⁹⁵. Assuming that, it is clear that the drafters would have decided to exclude those contracts from the application of the CISG; this conclusion is based on a contextual interpretation of the Convention⁹⁶. IP rights are basically national rights; certainly the CISG would not achieve its goal of having universal acceptance if it would affect a matter so intimately connected to national law; in fact, that is the rationale behind most of the exclusions in Article 2 of the Convention, notably (a), (b) and (c)⁹⁷.

Indeed, an attempt to govern the matter of IP rights of the buyer – for instance, the drafters could have considered the rights of someone who buys books and objects of art, all of them goods covered by the CISG that raise IP issues – could have jeopardized the possibility of reaching a compromise. Therefore, when there is no tangible property being sold, but rather the transfer of

⁹³ *But see id.* at ¶ 58 (stating that “even when computer programs are sold/downloaded over the Internet [...], the CISG default rules seem well-suited to regulate the parties’ obligations and remedies for breach”).

⁹⁴ Several provisions make reference to “delivery”, “carriage” and “marking the goods”, which are expressions that only make sense if the goods are tangible. However, if the CISG were to apply to contracts performed over the Internet, one solution would be to disregard these provisions, or find electronic equivalents for the concepts used by them. Therefore, the based on the Convention’s reliance on terms that assume tangibility of the goods, by itself, is not sufficient to exclude the applicability of the CISG to these transactions. The stronger argument is based on the context of the Convention.

⁹⁵ Article 30 provides that the seller has the obligation to “transfer the property in the goods”; the issue would be to determine to what extent “property” should be understood. In software contracts, the user will at most “own” the right to *use* it and the media were it is recorded in case there is tangible media. A possible counterargument would be that the CISG is not intended to govern “the effect which the contract may have on the property in the goods sold” (Article 4(b)) and therefore, even in the absence of contractual provisions, no one would claim that a software contract entitles the user to resell it freely. However, the issue here is different: the problem is not to determine the property rights of the buyer, but rather *over what* the user has a right (regardless if this right is property or anything else).

⁹⁶ The expression “contextual interpretation” is used here in the meaning of Article 31(1) of the Vienna Convention on the Law of the Treaties (1969), meaning interpretation of the text of the CISG “as whole”, *i.e.*, based on the idea that it is intended to form an autonomous system, a claim that finds support in Article 7 of the CISG. Article 31 of the 1969 Vienna Convention provides that “[a] treaty shall be interpreted in good faith in accordance with the ordinary meaning given to the terms of the treaty in their context and in the light of its object and purpose” (emphasis added).

⁹⁷ See *Secretariat Commentary* [on Article 2 of the 1978 Draft], *United Nations Conference on Contracts for the International Sale of Goods, OFFICIAL RECORDS: DOCUMENTS OF THE CONFERENCE AND SUMMARY RECORDS OF THE PLENARY MEETINGS AND OF THE MEETINGS OF THE MAIN COMMITTEES (VIENNA, 10 MARCH - 11 APRIL 1980) 16, (1981), available at <<http://cisgw3.law.pace.edu/cisg/text/secomm/secomm-02.html>>* (last visited Apr. 10, 2005). According to the Secretariat Commentary, the rationale to exclude consumer sales (Article 2(a)) was “that in a number of countries such transactions are subject to various types of national laws that are designed to protect consumers”, *id.* at ¶ 3. In respect to sales by auction (Article 2(b)), those “are often subject to special rules under the applicable national law and it was considered desirable that they remain subject to those rules even though the successful bidder was from a different State”, *id.* at ¶ 5. Finally, “[s]ubparagraph (c) of [Article 2] excludes sales on judicial or administrative execution or otherwise by authority of law, because such sales are normally governed by special rules in the State under whose authority the execution sale is made”, *id.* at ¶ 6.

a right defined and governed by domestic law, it seems that the correct conclusion is to exclude the application of the Convention. In respect to IP rights related to tangible goods, the matter is governed, under the principle adopted by Article 42(1), by domestic law⁹⁸.

II.2.3. Exclusion of consumer sales under Article 2(a)

Under Article 3(a), the sale of goods “bought for personal, family or household use” is excluded from the sphere of application of the Convention if the seller, “at any time before or at the conclusion of the contract”, “knew” or “ought to have known” that the goods were bought for such purpose. The critical language is the expression “ought to have known”: in a transaction celebrated by traditional means it might be difficult to know whether each buyer will use the goods professionally or not. When the parties are dealing electronically, the difficulty might be greater: how to acquire such knowledge if the contact between the parties is minimal⁹⁹?

It is true that one could say that the seller “ought to have known” the consumer purpose of the sale when the goods sold are only suitable for non-commercial use; also, when the buyer purchases several units of the same item, it would be reasonable to presume that the sale was not for consumer purposes¹⁰⁰. However, if those aspects (nature of the goods or number of units) do not lead to any conclusion, it will be difficult to determine whether the seller “ought to have known” of the consumer purpose of the sale¹⁰¹. It has been suggested that the party who is arguing the applicability of the CISG would have the burden of proving that the seller did not know nor ought to have known of the consumer purpose of the sale¹⁰².

⁹⁸ Article 42(1) provides that the seller must deliver the goods free from any right or claim by a third party based on IP that the seller knew or could not have been unaware at the time of the conclusion of the contract; however, this obligation exists only when the IP claim is based on “the law of the State where the goods will be resold or otherwise used, if it was contemplated by the parties at the time of the conclusion of the contract that the goods would be resold or otherwise used in that State” (subparagraph (a)) or “under the law of the State where the buyer has his place of business” (subparagraph (b)). Also, from what was said above, it is clear that the CISG is not intended to govern IP matters and, therefore, under Article 7(2), they are to be settled by domestic law.

⁹⁹ In that respect, see *UNCITRAL e-Commerce WkG: 38th Session Report*, *supra* note 64, at 23 (¶ 120) (noting that “in electronic selling, the contact between seller and buyer might be so minimal that it would be impossible for the seller to know whether the prospective buyer was a consumer”); John D. Gregory, *supra* note 56, at 321 (stating that “the ‘ought to have known’ test of the CISG is not [a] realistic online”).

¹⁰⁰ For those conclusions, see Franco Ferrari, *supra* note 19, at 87.

¹⁰¹ Indeed, the Convention on the Use of Electronic Communications in International Contracts so far simply excludes its applicability to consumer transactions, without giving the seller the benefit of relying on the applicability of the Convention if he did not know of the consumer purpose; see *supra* note 48, Article 2(1)(a).

¹⁰² Franco Ferrari, *supra* note 19, at 87.

III. ELECTRONIC COMMUNICATIONS UNDER THE CISG

The use of technological means raises not only issues related to the applicability of the CISG, which were explored in Part II, but also in respect to its material provisions. Indeed, the parties may negotiate an agreement electronically: one of them might make, withdraw or revoke an offer by means of an electronic message, and the other party might make or revoke an acceptance using the same means. In those cases, the issue is whether the CISG allows the parties to use electronic communications in the process of formation of the sale contract, a matter that will be examined in Part III.2. After the contract is formed, the parties might still use electronic communications to interact with each other. Then, the issue is whether the effects – attributed by the CISG to certain communications made after the conclusion of the sales contract – will also be given to electronic communications; this is the topic covered in Part III.3. The analysis of these issues requires a prior review of the general rules of the CISG in respect to communications between the parties in light of the technological developments.

III.1. General Rules

Articles 11 and 13 of the CISG were inserted in the “General Provisions” chapter of the first part of the Convention, suggesting that they are intended to play a role on the interpretation of the provisions related to formation of the contract, obligations of the parties and other matters contained in the second and third parts of the CISG. Indeed, they are the basis of the principle of informality, which governs the interactions between the parties, either before or after a contract is concluded. Article 13 states it expressly by presenting an explanation of a term (“writing”) that appears in other parts of the CISG; Article 11, although phrased in a manner that limits its applicability to formation of the contract, has an important role in other matters, as it will be demonstrated in Part III.1.1 that follows.

III.1.1. *Absence of form requirements under Article 11*

The CISG is a set of default rules: under Article 6, the parties can exclude the application of the Convention or “derogate from or vary the effect of its provisions”, subject to a few exceptions¹⁰³. The idea is to provide a “safe harbor” to the parties who are not willing or cannot afford to negotiate a detailed contract, giving them some degree of certainty and predictability¹⁰⁴. That is in

¹⁰³ Article 6 provides that “[t]he parties may exclude the application of this Convention or, subject to article 12, derogate from or vary the effect of any of its provisions”. There are some exceptions to party autonomy to derogate the CISG provisions, although extremely limited in number: Article 12 (as Article 6 expressly provides) and the provisions dealing with Public International Law matters (Articles 89-101). In that respect, see *Rheinland Versicherungen (Tribunale di Vigevano)*, *supra* note 16, at ¶ 11 (stating that “all provisions of the United Nations Convention [...] except for Article 12 and Articles 89-101, can be derogated from by the agreement of the parties”). See also Avery Wiener Katz, *The Relative Costs of Incorporating Trade Usage into Domestic versus International Sales Contracts: Comments on Clayton Gillette, Institutional Design And International Usages under the CISG*, 5 CHI. J. INT’L L. 181, 186, n.8 (2004) (stating the same).

¹⁰⁴ Indeed, it is possible to say that the CISG, by providing a good set of default rules, can reduce transaction costs. However, that is not necessarily true: it has already been said that “inefficient defaults only raise transaction costs unnecessarily”, since the parties will be compelled to contract out of them; see Alan Schwartz & Robert E. Scott, *Contract Theory and the Limits of Contract Law*, 113 YALE L.J. 541, 608 (2003). It should be remember that, since the CISG is extremely liberal in respect to the possibility of derogation of its provisions, the costs of contracting out, either in case of exclusion or derogation, does not seem to be significant if the parties are already drafting a written agreement.

fact the reality of international trade: a substantial part of the transactions are concluded without an effective discussion of the matters covered by the substantive provisions of the CISG or even without the concern of producing legal documents¹⁰⁵; if the parties are concerned in having a written document, they will often use standard contract terms. If the CISG assumes that reality of simplicity, informality and little concern in preparing a detailed contract for each individual transaction, it would not make sense to adopt a restrictive and formalistic set of rules on formation of contracts.

Article 11 establishes a “general principle of informality”¹⁰⁶ when it provides that a contract of sale (a) “need not be concluded in or evidenced by writing”, (b) “is not subject to any other requirement as to form” and (c) “may be proved by any means, including witnesses”. The consequence of what the first part of Article 11 provides – items ‘a’ and ‘b’ above – is that the simple consensus between the parties will be sufficient to form a contract, without any form requirement¹⁰⁷. Based on that, courts have already held that contracts can be formed by oral representations¹⁰⁸. In that respect, Article 11 preempts domestic law rules on *formal* validity, although validity is a matter excluded from the CISG scope of application by virtue of Article 4(a).

The second part of the provision – item ‘c’ – gives a procedural dimension to informality when it provides that the contract can be evidenced by any means, thus overriding any national law provision that conditions the enforceability of a contract to the existence of evidence in writing (such as a statute of frauds¹⁰⁹) or that prohibits oral evidence that is prior or contemporaneous to the agreement between the parties (such as a parol evidence rule¹¹⁰).

¹⁰⁵ See Larry A. DiMatteo et al., *The Interpretative Turn in International Sales Law: An Analysis of Fifteen Years of CISG Jurisprudence*, 24 NW. J. INT'L L. & BUS. 299, 322 (2004) (stating that “[t]he CISG embodies a modern approach to contract formation, recognizing that contracts are often concluded quickly and without a formal writing”).

¹⁰⁶ See Jerzi Rajski, *Article 11*, in BIANCA-BONELL COMMENTARY ON THE INTERNATIONAL SALES LAW 121, 121 (Cesare Massimo Bianca ed., Milan, Giuffrè, 1987), available at <<http://cisgw3.law.pace.edu/cisg/biblio/rajski-bb11.html>> (last visited Apr. 12, 2005).

¹⁰⁷ See *id.* at 122 (stating that Article 11 adopts the theory of consensualism, well-known in European continental legal systems).

¹⁰⁸ See *inter alia* SO. M. AGRIL s.a.s di Ardina Alessandro & C. v. Erzeugerorganisation Marchfeldgemüse GmbH & Co. KG, Tribunale [District Court] di Padova, Italy, 25 February 2004, Case Number 40552, available at <<http://cisgw3.law.pace.edu/cases/040225i3.html>> (last visited Apr. 12, 2005); Oberlandesgericht [Provincial Court of Appeal] Köln, Germany, 22 February 1994, Case Number 22 U 202/93, available at <<http://cisgw3.law.pace.edu/cases/940222g1.html>> (last visited Apr. 12, 2005). See also Geneva Pharmaceuticals Technology Corp. v. Barr Laboratories, Inc., 201 F.Supp.2d 236, 281 (S.D.N.Y. 2002), available at <<http://cisgw3.law.pace.edu/cases/020510u1.html>> (last visited Apr. 14, 2005) (stating that, under Article 11, “[a] contract may be proven by a document, oral representations, conduct, or some combination of the three”).

¹⁰⁹ See Franco Ferrari, *Writing Requirements: Articles 11-13*, in DRAFT UNCITRAL DIGEST AND BEYOND: CASES, ANALYSIS AND UNRESOLVED ISSUES IN THE U.N. SALES CONVENTION 206, 212 (Franco Ferrari et al. eds., Munich, Sellier 2004) (stating that Article 11 precludes domestic law rules that exclude the possibility of witness evidence in cases where the value is higher than a threshold amount, such as UCC § 2-201). See also *Filanto, S.p.A. v. Chilewich Intern. Corp.*, 789 F.Supp. 1229, 1238, n.7 (S.D.N.Y. 1992), available at <<http://cisgw3.law.pace.edu/cases/920414u1.html>> (last visited Apr. 12, 2005) (stating that “the Convention essentially rejects both the Statute of Frauds and the parol evidence rule”).

¹¹⁰ UCC § 2-202 adopts a parol evidence rule when it provides that a written document, on which the parties give their final expression of their agreement, “may not be contradicted by evidence of any prior agreement or of a contemporaneous oral agreement”. In that respect, see *MCC-Marble Ceramic Center, Inc., v. Ceramica Nuova d’Agostino, S.p.A.*, 144 F.3d 1384, 1392 (11th Cir. 1998), available at <<http://cisgw3.law.pace.edu/cases/980629u1.html>> (last visited Apr. 13, 2005) (holding that “[t]he CISG precludes the application of the parol evidence rule”). See also *Filanto*, *supra* note 109, at 1238, n.7; *Claudia v. Olivieri Footwear Ltd.*, No. 96 Civ. 8052(HB)(THK), 1998 WL 164824, at *4-6 (S.D.N.Y. 1998), available at <<http://cisgw3.law.pace.edu/cases/980406u1.html>> (last visited Apr. 27, 2005). But see *Beijing Metals & Minerals Import-Export Corporation v. American Business Center Inc. et al.*, 993 F.2d 1178, 1183, n.9 (5th Cir. 1993), available at <<http://cisgw3.law.pace.edu/cases/930615u1.html>> (last visited Apr. 27, 2005) (holding that “we need not resolve this choice of law issue, because our discussion is limited to application of the parol evidence rule (which applies regardless), duress, and

The legislative history of Article 11 demonstrates that this provision was based on a concern of the then recent technological developments in the field of telecommunications: it was expressly mentioned that “[t]he inclusion of article [11] in the Convention was based on the fact that many contracts for the international sale of goods are concluded by modern means of communication which do not always involve a written contract”¹¹¹. Of course, the “modern” methods mentioned in the legislative history are not modern anymore; now, the concern is with new technologies developed after the Convention was adopted.

Nevertheless, it is clear that, because the Convention does not set any form requirement for the conclusion of the contract, it can be formed also by electronic means¹¹². The underlying idea is that any form of communication can be used to form a contract as long as the parties can understand each other (*i.e.*, the data message must be readable by the recipient). Article 11, however, may not be applicable in case of an Article 96 reservation, an issue that will be discussed in Part III.1.2.2.

Although Article 11 is phrased in terms that seem to limit its applicability to issues of formation, the principle of informality which underlies that provision is extended to the entire Convention¹¹³. That is a natural consequence when one considers that the CISG was adopted based on the assumption that a significant number of international trade transactions are made without a significant concern with formality matters. In fact, the informality principle appears in other parts of the Convention, such as in Article 29(1), which permits the modification or termination of a contract “by the mere agreement of the parties” (*see* Part III.3.2). If the CISG accepts informality in the most crucial moments of the “life” of a contract, its formation and its termination, it would not make sense to require formalities in the communications between the parties during the period where the parties are (or at least should be) performing their obligations under the contract.

III.1.2. Definition of “writing” under Article 13

Article 13 provides that “[f]or the purposes of this Convention ‘writing’ includes telegram and telex”. Assuming that the CISG is based on the informality principle, it seems odd that the Convention has a provision specifying what should be understood as “writing”. However, the provision makes sense: aside from Articles 11, 12, 13 and 96, Articles 21(2) and 29(2) contain the

fraudulent inducement”).

¹¹¹ See *Secretariat Commentary* [on Article 10 of the 1978 Draft, counterpart of the current Article 11], *United Nations Conference on Contracts for the International Sale of Goods*, OFFICIAL RECORDS: DOCUMENTS OF THE CONFERENCE AND SUMMARY RECORDS OF THE PLENARY MEETINGS AND OF THE MEETINGS OF THE MAIN COMMITTEES (VIENNA, 10 MARCH – 11 APRIL 1980) 20, ¶ 2 (1981), available at <<http://cisgw3.law.pace.edu/cisg/text/secomm/secomm-11.html>> (last visited Apr. 12, 2005).

¹¹² There seems to be consensus on that topic. See CISG-AC Opinion Number 1, *Electronic Communications under CISG*, ¶ 11.1, 15 August 2003 (Rapporteur: Professor Christina Ramberg, Gothenburg, Sweden), available at <<http://cisgw3.law.pace.edu/cisg/CISG-AC-op1.html>> (last visited Apr. 13, 2005) [hereinafter “CISC-AC 1”]; UNCITRAL e-Commerce WkG: *Secretariat Note on e-Contracting and CISG*, *supra* note 18, at 10 (¶ 31); Franco Ferrari, *supra* note 18, at 297 (all stating that Article 11 permits electronic contracting). See also Michael E. Boersma, *International Business Transactions, the Internet, and the Convention on the International Sale of Goods: Preventing Unintentional Pitfalls*, 7 J. INT’L L. & PRAC. 107, 122 (1998) (stating that “a contract evidenced solely by e-mail is sufficient to meet the requirements of Article 11”).

¹¹³ See Franco Ferrari, *supra* note 109, at 207 (stating that the informality principle “should in fact apply generally to all matters governed by the CISG”).

term “writing”. Furthermore, the parties might, under Article 6, derogate Article 11 and impose a writing requirement for the termination of the contract; if the parties do not define writing, Article 13 will come into play. Also, one could argue that Article 13 might be relevant when there is an Article 96 reservation, a controversial issue due to the ambiguous language of the CISG (see Part III.1.2.2)¹¹⁴. Another relevant issue relating to Article 13 is whether the definition of writing encompasses more modern means of communication aside from telegram and telex, which will be examined next (Part III.1.2.1).

III.1.2.1. Article 13: gap-filling interpretation

The interpretation issue arising from Article 13 is not unusual: every jurisdiction faces similar problems when their Courts seek to apply the existing statutory or constitutional law to new social phenomena; for instance, in the past, the development of new telecommunications technologies created some doubts regarding whether their use is protected against undue invasions.¹¹⁵ Usually legal texts are drafted with a certain degree of generality in order to cover multiple situations, but it is impossible to foresee all possible future social changes. Drafters have no alternative but to rely on information regarding the past and develop rules that are suitable to current needs. Indeed, immediately after the Vienna Diplomatic Conference that resulted in the final text of the CISG, Article 13 seemed to be very straightforward, and some even said that there is nothing to discuss about it,¹¹⁶ a statement that is not true anymore.

The wording of Article 13 is a clear indication that its purpose is not to set the outer limits of the term “writing”¹¹⁷. Rather, the expression “includes” suggests that Article 13 presents an exemplificative list of alternative means of communication, aside from the traditional ones, such as a letter or any other tangible document. The problem is that, today, there are several other means of communication which are not mentioned in Article 13. Based on that, it is submitted

¹¹⁴ Another issue is whether Article 13 is relevant for the definition of writing requirements in other conventions. On that matter, see Larry A. DiMatteo et al., *supra* note 105, at 324 (stating that the CISG might be applicable to determine whether the writing requirements of the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards of 1958 – in respect to agreements to arbitrate – and of the Brussels Convention on Jurisdiction and Enforcement of Judgments in Civil and Commercial Matters – in respect to choice of forum agreements – are met). See also *Filanto*, *supra* note 109, at 1237 (interpreting “the ‘agreement in writing’ requirement of the Arbitration Convention in light of, and with reference to, the substantive international law of contracts embodied in the Sale of Goods Convention”); Tribunal of International Commercial Arbitration at the Russian Federation Chamber of Commerce and Industry, Russian Federation, 28 April 1995, Case Number 400/1993, at ¶ 3.4, available at <<http://cisgw3.law.pace.edu/cases/950428r1.html>> (last visited Apr. 28, 2005) (holding that the arbitration agreement, formed by exchange of telexes, was valid, with reference to the New York Convention and Article 13 of the CISG).

¹¹⁵ For instance, the U.S. Supreme Court initially held, in a literal interpretation of the Fourth Amendment, that the protection of “persons, houses, papers, and effects” against “unreasonable searches and seizures” did not extend to telephone conversations. *Olmstead v. United States*, 277 U.S. 438 (1928). It is interesting to notice the dissent by Justice Brandeis: he states that “[e]xceptions guaranteeing to the individual protection against specific abuses of power must have a [...] capacity of adaptation to a changing world”. *Id.* at 472. Based on that, he makes an analogy between a “private phone message” with a “sealed letter” and does not find any difference between them. *Id.* at 475. It is clear in his opinion that he tries to determine a general principle behind the Fourth Amendment (“the right to be let alone”, *id.* at 478) and based on that adapt the constitutional provision to the new times. *Olmstead* was later overruled by *Charles Katz v. United States*, 389 U.S. 347 (1967).

¹¹⁶ See Gyula Eörsi, *General Provisions*, in THE UNITED NATIONS CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS 2-1, 2-34 (Galston & Smit ed., Matthew Bender, 1984), available at <<http://cisgw3.law.pace.edu/cisg/biblio/eorsi1.html>> (last visited Apr. 13, 2005) (stating that Article 13 “needs no comment”).

¹¹⁷ See John O. Honnold, *supra* note 45, at § 130, 141; Ulrich Schroeter, *Interpretation of ‘Writing’: Comparison between Provisions of the CISG (Article 13) and Counterpart Provisions of the PECL*, 6 VINDOBONA J. 267, 270 (2002), available at <<http://cisgw3.law.pace.edu/cisg/biblio/schroeter3.html>> (last visited Apr. 16, 2005).

that Article 13 contains a gap, *i.e.*, it fails to address a situation which is clearly covered by the Convention¹¹⁸, and therefore it requires gap-filling in accordance with Article 7(2)¹¹⁹. In fact, there are two reasons to conclude that Article 13 contains a gap: (a) first, as it was mentioned above (Part III.1.2), the definition of writing is relevant for the purposes of the Convention; (b) the purpose of Article 13 seems to be to define “writing”, but instead of providing an explicit criterion, it relies on examples. However, it is possible to derive some guidelines from the examples; by interpreting the provision in light of the principle of informality (Part III.1.1), as directed by Article 7(2), one can determine whether the new technologies are encompassed by Article 13.

The starting point is the characteristic of something that was certainly deemed to be a “writing” when the CISG was drafted. For instance, a letter *signed* by one of the parties is certainly “writing”. In general terms, its attributes are:

- a) *Means for future reference, i.e.*, the information is fixed in the document and can be subsequently used for reference.
- b) *Identification of the sender, i.e.*, the sender of the message is perfectly identifiable in the document and there is a device (signature) to authenticate her identity (although not infallible).
- c) *Inalterability of the content, i.e.*, in case there is an attempt to modify the content of the letter, in general it can be noticed.

The Convention could have required that any other “writing” meet all of those three requirements, but the examples referred to in Article 13 (telex and telegram) and the idea of informality that underlies the CISG indicate a different conclusion. There is no doubt that both technologies (telex and telegram) have the attribute (a) mentioned above: the recipient always receives a hardcopy of the message and he can use it for future reference. However, a telegram does not have a mechanism to authenticate the identity of the sender and, therefore, does not meet requirement (b). Moreover, since a telex message is printed in the recipient’s device, the recipient is able to use that same device to easily retype the message (with whatever modifications she wants) and destroy the original; hence, this means of communication does not have attribute ‘c’.

As corollary, the only criterion to determine whether something is “writing” under the CISG is whether it has attribute (a), *i.e.*, whether the data contained is recorded in a manner that allows future reference. This criterion is consistent with the informality principle that underlies the Convention: if the CISG defined writing as requiring security measures to ensure identification

¹¹⁸ See Siegfried Eiselen, *ECommerce and the CISG: Formation, Formalities and Validity*, 6 VINDOBONA J. 305, 309 (2002) (stating that the gap “clearly falls within the scope of the Convention because it deals with other forms of communication and there is no indication that the Convention intended to exclude any specific kind of communication”, but “on the contrary, it seems to aim at being all inclusive”).

¹¹⁹ See Siegfried Eiselen, *Electronic commerce and the UN Convention on Contracts for the International Sale of Goods (CISG) 1980*, 6 EDI L. REV. 21, 36 (1999), also available at <<http://cisgw3.law.pace.edu/cisg/biblio/eiselen1.html>> (last visited Apr. 16, 2005); Ulrich Schroeter, *supra* note 117, at 270. On CISG gap-filling in general, see Franco Ferrari, *Interpretation of the Convention and gap-filling: Article 7*, in DRAFT UNCITRAL DIGEST AND BEYOND: CASES, ANALYSIS AND UNRESOLVED ISSUES IN THE U.N. SALES CONVENTION 138, 157-71 (Franco Ferrari et al. eds., Munich, Sellier 2004).

of the sender (attribute 'b') and inalterability of the content (attribute 'c'), it would in fact represent an obstacle to international commerce, in great part based on the notion of informality. Furthermore, this definition of "writing" is the same as the one contained in the MLEC¹²⁰, in the UNCITRAL Draft Convention on Electronic Communications¹²¹ and another United Nations Convention¹²², although it is not necessary (nor allowed) to resort to those documents to interpret Article 13 as containing the definition adopted by them. Similarly, if the Convention by its own means provides a workable definition of "writing", resort to the UNIDROIT Principles is forbidden by Article 7(2), since the notion of "writing" under those Principles is more restrictive (or more formal): the information recorded in the writing must also be "capable of being reproduced in tangible form".¹²³ Nothing in the CISG suggests that writing must be reproducible in tangible form: as long as content can be used for future reference (even in a computer screen, for instance), it is sufficient.

To oppose this view, a possible argument would be that the line of reasoning here presented has a wrong assumption: that a "writing" has a fourth attribute, *tangibility*; to reinforce that argument, one might say that, at the time the CISG was drafted, all "writings" – letters, telegram and telex – were tangible, which is not necessarily true in respect to some electronic communications (except when the recipient decides to print them). However, tangibility by itself does not have any function independently from the three attributes mentioned above. For instance, the tangibility of a letter serves only to permit future reference (attribute 'a') and prevent modification (attribute 'b'), and nothing else; the tangibility of telex message serves only for future reference and does not prevent modification. Therefore, tangibility cannot be considered an autonomous attribute of "writing".

¹²⁰ The UNCITRAL MLEC (*supra* note 67, at Article 6) provides that "[w]here the law requires information to be in writing, that requirement is met by a data message if the information contained therein is accessible so as to be usable for subsequent reference".

¹²¹ Article 9(2) of the Draft Convention (*supra* note 48, at 48) provides that "[w]here the law requires that a communication or a contract should be in writing, or provides consequences for the absence of a writing, that requirement is met by an electronic communication if the information contained therein is accessible so as to be usable for subsequent reference".

¹²² See UN Convention on the Assignment of Receivables in International Trade (2001), G.A. Res. 56/81, U.N. GAOR, 56th Sess., U.N. Doc. A/RES/56/81 (2002), available at <<http://www.uncitral.org/english/texts/payments/cte-assignment-convention-e.pdf>> (last visited Apr. 27, 2005) (defining "writing" in Article 5(c) as means any form of information that is accessible so as to be usable for subsequent reference"). But see the UNIDROIT Convention on International Factoring (1988), available at <<http://www.unidroit.org/english/conventions/1988factoring/1988factoring-e.htm>> (last visited Apr. 27, 2005) (providing in Article 1(4)(a) (b) that a "notice in writing need not be signed but must identify the person by whom or in whose name it is given" and that the expression "notice in writing" includes but is not limited to, telegrams, telex and any other telecommunication capable of being reproduced in tangible form").

¹²³ See UNIDROIT PRINCIPLES OF INTERNATIONAL COMMERCIAL CONTRACTS 2004 (Rome 2004), available at <<http://www.unidroit.org/english/principles/contracts/principles2004/blackletter2004.pdf>> (last visited Apr. 16, 2005). Article 1.11 defines writing as "any mode of communication that preserves a record of the information contained therein and is capable of being reproduced in tangible form". But see Siegfried Eiselen, *Remarks on the Manner in which the UNIDROIT Principles of International Commercial Contracts may be used to Interpret or Supplement Article 29 of the CISG*, 14 PACE INT'L L. REV. 379, 382-383 (2002) (stating that, to fill the gap in Article 13 of the CISG "[i]t is suggested that the meaning of 'written' should be extended to include these forms of communications in accordance with the definition contained in Article 1.10 of the [1994] UNIDROIT Principles"). The 1994 version of the UNIDROIT Principles had the same definition of writing, but it was included in Article 1.10. It should be mentioned that, even if the CISG did not have a workable definition of writing, it is dubious whether the gap could be filled by resort to the UNIDROIT Principles, as Article 7(2) provides that, in case of absence of CISG principles to solve the matter, it should be settled in accordance with the law applicable by virtue of the conflict of laws rules.

Given this broad definition of “writing”, it seems to encompass any of the more modern means of communication.¹²⁴ Therefore, the data messages created by the use of most of the technologies mentioned in Part I, either the ones that just extend the human ability to communicate (e.g. e-mail, fax or a text chat), or the ones that play an active role in the formation of the contract (e.g. EDI and e-commerce solutions for sales in a dynamic web site), can be considered “writings” under the CISG, as long as a record is kept for future reference, even if it is in intangible media. However, if no record is kept, such as the case of Internet telephony, then there is no “writing” under Article 13 of the CISG.

Under Article 13 a “writing” does not need have to have a signature¹²⁵. However, today there are some security devices that can emulate, with a higher degree of safety, the function of a signature in a paper document, such as the so-called “electronic signatures”; for instance, a scheme of digital signature based on a public-key infrastructure (“PKI”) gives the recipient of a data message certainty that it was really sent by the sender and that its content was not modified¹²⁶. Under the CISG, the use of those technologies is not required to give data messages the status of “writings”, but the parties may, under Article 6, agree to use electronic signatures in the communications between them and therefore alter the definition of writing.

III.1.2.2. Possible impact of Article 13 on an Article 96 reservation

Under Article 96 of the CISG, a Contracting State whose legislation requires that contracts of sale be concluded or evidenced in writing may declare that the provisions that allow the formation, modification or termination of contract of sale in any form other than writing will not be applicable if one of the parties has her place of business in that Contracting State. Therefore, Articles 11 and 29 might not be applicable in case of an Article 96 reservation. However, the fact that one of the parties has her place of business in a reserving State does not turn the form requirements of the law of that State automatically applicable¹²⁷. The majority view is that the form requirements of the reserving State will be applicable if the conflict of laws rules of the forum determine that the law of the reserving State is applicable; if the law of a non-reserving Contracting State is applicable, then the CISG rules eliminating form requirements will be applicable¹²⁸.

¹²⁴ See Joseph Lookofsky, *supra* note 74, at ¶ 98, available at <<http://cisgw3.law.pace.edu/cisg/biblio/loo13.html>> (last visited Apr. 14, 2005) (stating that “Article 13 does not define the term to exclude such increasingly popular means of communication as telefax transmissions or electronic data exchange”); Franco Ferrari, *supra* note 109, at 209 (arguing that telefax and communications transmitted electronically should be considered “writings”); John O. Honnold, *supra* note 45, at § 130, 141 (mentioning EDI and fax); Siegfried Eiselen, *supra* note 119, at 36 (mentioning fax, e-mail and EDI messages); Mario J.A. Oyarzábal, *International Electronic Contracts: A Note on Argentine Choice of Law Rules*, 35 U. Miami Inter-Am. L. Rev. 499, 504 (2002) (mentioning fax, e-mail and EDI messages).

¹²⁵ See John O. Honnold, *supra* note 45, at § 130, 141-42.

¹²⁶ For an extensive description of the different electronic signatures technologies, particularly digital signatures relying on public-key cryptography, see Guide to Enactment (¶ 29-62) of the UNCITRAL Model Law on Electronic Signatures, G.A. Res. 56/80, U.N. GAOR, 56th Sess., U.N. Doc. A/RES/56/80 (2001), English version available at <<http://www.uncitral.org/english/texts/electcom/ml-elecsig-e.pdf>> (last visited Apr. 16, 2005).

¹²⁷ The reason is simple: if the law of the reserving State were to be automatically applicable, the situation where both parties are from countries which made an Article 96 reservation would be without a solution.

¹²⁸ See *Hispafruit BV v. Amuyen S.A., Arrondissementsrechtbank [District Court] Rotterdam, Netherlands, 12 July 2001, Case Number HA ZA 99-529*, ¶ 4.5, available at <<http://cisgw3.law.pace.edu/cases/010712n1.html>> (last visited Apr. 12, 2005) (holding that, in case of an Article 96 reservation, the “question whether the contract has been validly concluded [...] should be answered by the

In case the law of a reserving State is applicable, the issue is whether the definition of “writing” contained in Article 13 (*see* Part III.1.2.1 *supra*) will have any impact on the writing requirement of the law of the reserving State. In other words, supposing the reserving State law provides that a contract might not be concluded or evidenced by the exchange of e-mails between the seller and the buyer, the issue is whether Article 13 would trump the definition of writing of the reserving State’s domestic law. It has been already pointed out that Article 13 of the CISG was included based on a proposal by the Federal Republic of Germany, which was not intended to be only a “definition of the term ‘writing’ as used in Articles 21(2) and 29(2)”, but rather it was “meant to achieve a uniform objective standard for form requirements, so that parties need not comply with domestic form requirements which perhaps impose higher standards and about which it may be difficult to obtain information”¹²⁹. This understanding, however, is universally accepted¹³⁰. The main objection to the interpretation that extends the definition of “writing” to the domestic law of a reserving State is the wording of Article 13, which provides that “writing” includes telegram and telex “[f]or the purposes of this Convention”.

On the other hand, there is a strong argument to rely on the legislative history on this issue: if indeed Article 13 was part of bargain to accept the possibility of reservation provided by Article 96, it seems logical that the application of the domestic law by virtue of the reservation can be limited by Article 13¹³¹. The fact that Article 13 was inserted immediately after Article 12, which deals with the effect of an Article 96 reservation, is also suggestive. Moreover, this construction advances the purpose of the CISG in achieving uniformity and predictability. Based on those

law which is applicable according to the rules of private international law” and not directly by the rules of the Contracting State which made an Article 96 Reservation). Also adopting the same view: Franco Ferrari, *supra* note 109, at 213-14; Peter Schlechtriem, *supra* note 82, at 45; Gyula Eörsi, *supra* note 116, at 2-33.

¹²⁹ Peter Schlechtriem, *supra* note 82, at 46 (acknowledging, however, that “because of the awkward wording of Article 13, this interpretation is open to criticism”). *See also* Jerzi Rajski, *Article 13*, in *BIANCA-BONELLI COMMENTARY ON THE INTERNATIONAL SALES LAW* 128, 130, (Cesare Massimo Bianca ed., Milan, Giuffrè, 1987), available at <<http://cisgw3.law.pace.edu/cisg/biblio/rajski-bb13.html>> (last visited Apr. 13, 2005) (concluding that Article 13 may be applied also to “writing requirements provided for by the provisions of domestic law exceptionally applied according to relevant conflict-of-law rules” in case of an Article 96 reservations, but stating that it “cannot eliminate some special requirements as to the form imposed by applicable domestic law such as authentication by a consulate or certification by a public authority, document under seal, etc.”); Larry A. DiMatteo et al., *supra* note 105, at 324 (citing Peter Schlechtriem).

¹³⁰ *See* John O. Honnold, *supra* note 45, at § 130, 142 (stating that “[w]hether electronic communications satisfy domestic formal requirements preserved by a declaration (reservation) under Article 96 [...] depends on the domestic law preserved by the reservation”). *See also* Tribunal of International Commercial Arbitration at the Russian Federation Chamber of Commerce and Industry, Russian Federation, 10 June 1999, Case Number 55/1998, available at <<http://cisgw3.law.pace.edu/cases990610r1.html>> (last visited Apr. 14, 2005). In this case, the arbitral tribunal rejected the buyer’s claim that the modifications of the contract made by the exchange of fax messages were invalid. Since the seller was from a Contracting State who made an Article 96 reservation (Russian Federation), the arbitral tribunal applied, by virtue of the conflict of laws rules, Russian law in respect to the form requirements. However, it did not rely on the definition of writing of Article 13, but rather on Article 434(2) of the Civil Code of the Russian Federation, which provides that “the contract may be concluded in writing either by composing one single instrument signed by the parties, or by exchanging 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”.

¹³¹ During the 1980 Vienna Diplomatic Conference, the representative of the former USSR, which made an Article 96 reservation, did not oppose to the German proposal that ultimately led to Article 13, stating that “a new domestic law adopted by [the former USSR] in 1977, whereby written agreements had become mandatory for foreign trade transactions, included telegrams or telex under the definition of ‘written’”; therefore, it seems reasonable to assume that, at that time, the Contracting States were aware of the impact of Article 13 over domestic law of a State which made an Article 96, including for *formation* of contracts (Article 11), not only modification or termination (Article 29(2)). *See* Summary Records of Meetings of the First Committee (1980 Vienna Diplomatic Conference), 7th meeting (March 14, 1980), at ¶ 73, available at <<http://cisgw3.law.pace.edu/cisg/firstcommittee/Meeting7.html>> (last visited Apr. 17, 2005).

arguments¹³², it is possible to conclude that Article 13 can have an impact when the domestic law of a reserving State is applicable¹³³.

Nevertheless, there is at least one arbitral award¹³⁴ that examined this issue and applied the definition of “writing” contained in the domestic law of the reserving State (which was also applicable by virtue of the conflict of laws rules). However, since the definition of the reserving State domestic law did not contradict the definition in Article 13, it is dubious whether this precedent is indeed of value.

III.2. Formation of the Contract: Pre-Contractual Communications

Once it was established in Part III.1.1 that a contract can be formed by electronic means under Article 11 of the CISG, certain issues – that arise in connection of the use of more modern communications methods for the conclusion of a contract – should be examined.

Initially, it should be noted that the provisions of the CISG relating to formation (Articles 14-24) rely on a rigid offer-acceptance structure, which causes some difficulties in “complicated negotiations where there is a great deal of communication between the parties” and when they use “methods of communication such as EDI which requires a more flexible approach than the strict offer-acceptance dichotomy”¹³⁵. Nevertheless, it seems that the CISG provisions provide “enough flexibility to evade the constraints of forcing communications into either the offer or acceptance mould”¹³⁶; one example of a rule that provides flexibility is Article 18(1), which provides that “[a] statement made by or other conduct of the offeree indicating assent to an offer is an acceptance”.

Having said that, the issues relating to electronic formation of contracts under the CISG may be explored: first, is there an offer when a seller uses some technologies to market her products (Part III.2.1)? Second, when does an electronic communication relating to the formation of contract produce effects, *i.e.*, what is the exact moment in which a data message “reaches” the addressee under Article 24 (Part III.2.2)? Third, how to fit the more modern methods of communications in Article 20(1), which sets the moment when the period of time fixed by the offeror to accept an offer begins to run (Part III.2.3)?

¹³² However, the argument that interpreting Article 13 differently would make it almost meaningless (see Peter Schlechtriem, *supra* note 82, at 46, n.144) is not persuasive: not only Article 13 defines “writing” for the purposes of Articles 21(2) and 29(2), but it is also applicable in case the parties refer to “writing” in their agreement (see Franco Ferrari, *supra* note 109, at 210).

¹³³ If this interpretation is favored, Article 13 is able to provide a good framework even in cases where the form requirements of the law of a reserving State are applicable.

¹³⁴ See Tribunal of International Commercial Arbitration at the Russian Federation Chamber of Commerce and Industry, *supra* note 130.

¹³⁵ Siegfried Eiselen, *supra* note 119, at 23. On that topic, see also UNCITRAL *e-Commerce WkG: Secretariat Note on e-Contracting and CISG*, *supra* note 18, at 12-13 (¶ 42-44); Franco Ferrari, *supra* note 18, at 300-01.

¹³⁶ Siegfried Eiselen, *supra* note 119, at 23-24. See also John O. Honnold, *supra* note 45, at § 132.1, 145 (stating that “the Convention accommodates both the simple exchange of two communications and also the development of a contract when it is impossible to isolate an ‘offer’ and ‘acceptance’”).

III.2.1. Offer in e-commerce

The use of information technology tools to massively market products is not unusual. For instance, a seller can set up a “virtual” store to sell its products to Internet users (technology that plays an active role in the formation of the contract). Another possibility is to use mail merge tools to send several customized e-mails to different potential buyers (technology that extends human ability to communicate). The issue is whether a proposal made through the use of any of these technologies is an offer for CISG purposes.

III.2.1.1. The CISG definition of offer: Article 14

Under Article 14(1), a proposal for concluding a contract is an offer if: (a) it is “addressed to one or more *specific persons*”, (b) it is “sufficiently definite” (*i.e.*, “if it indicates the goods and expressly or implicitly fixes or makes provision for determining the quantity and the price”) and (c) if it “indicates the intention of the offeror to be bound in case of acceptance”¹³⁷. In respect to requirement ‘a’, Article 14(2) further clarifies that “[a] proposal other than one addressed to one or more specific persons is to be considered merely as an invitation to make offers, unless the contrary is clearly indicated by the person making the proposal”.

It is generally accepted that “advertisements in newspapers, radio and television, catalogues, brochures, price lists, etc., are considered invitations to submit offers”, *i.e.*, *invitationes ad offerendum* under Article 14(2)¹³⁸. The possibility of extending such understanding to web sites through which a prospective buyer can buy goods has already been acknowledged¹³⁹; under this line of reasoning, the act of marketing products on a web site would not be construed as an offer. Moreover, it has already been said that, since “price circulars sent to an indefinite group of people are considered not to constitute offers, even where the addressees are individually named”, “[t]he same general rule can apply as far as electronic messages are concerned”¹⁴⁰.

III.2.1.2. Possibilities arising from electronically generated proposals

The guidelines set forth in Part III.2.1.1 for proposals made through web sites and massive electronic messages are correct under the CISG: those proposals can be construed as not being “addressed to one or more *specific persons*” under Article 14(1). However, those guidelines may

¹³⁷ See Oberster Gerichtshof, *supra* note 75, at 149-150.

¹³⁸ UNCITRAL e-Commerce WkG: Secretariat Note on e-Contracting and CISG, *supra* note 18, at 13 (¶ 47). See also Franco Ferrari, *supra* note 18, at 301; Maria del Pilar Perales de Viscasillas, EL CONTRATO DE COMPRAVENTA INTERNACIONAL DE MERCANCIAS (CONVENCIÓN DE VIENA DE 1980) § 153 (Madrid, 2001), available at <<http://www.cisg.law.pace.edu/cisg/biblio/perales1.html>> (last visited Apr. 17, 2005).

¹³⁹ UNCITRAL e-Commerce WkG: Secretariat Note on e-Contracting and CISG, *supra* note 18, at 13 (¶ 47). See also Franco Ferrari, *supra* note 18, at 301; Jochen Zarella, *International Electronic Transaction Contracts Between U.S. and EU Companies and Customers*, 18 CONN. J. INT'L L. 479, 503 (2003) (stating that “[t]he demonstration of the willingness on a web page to sell a certain product is usually not an offer but an invitation to make an offer” and, therefore, “[i]n these cases the click on the purchase icon constitutes an offer”).

¹⁴⁰ UNCITRAL e-Commerce WkG: Secretariat Note on e-Contracting and CISG, *supra* note 18, at 13 (¶ 48). See also Franco Ferrari, *supra* note 18, at 301-02.

not be applicable in every situation: in some instances, the peculiarities of the transaction might undermine their general applicability.

For instance, suppose a seller uses a technology that plays an active role in the formation of the contract, such as a dynamic web site for the sale of products (human-machine interaction, with instantaneous *inter praesentes* communication¹⁴¹). When a prospective buyer (“Buyer 1”) enters in one of those dynamic web sites, in general a page is automatically generated with the information contained in a database maintained by the seller. In that database there will be multiple entries for each product; for instance, it will indicate that 300 units of product X are available at \$ 5.00, 1 unit of product Y is available at \$ 10.00 and that product Z is unavailable. Therefore, the page viewed by Buyer 1 will show products X and Y at the prices above mentioned, *but it will not show product Z*, because it is unavailable¹⁴². If Buyer 1 places an order for product Y, when Buyer 2 visits the web site, even a fraction of a second after Buyer 1 has placed her order, the page generated will only show product X, and no longer product Y (which is now out of stock). This example clearly demonstrates that the message conveyed on a dynamic page is sufficiently specific: it is built for each visit that is made to the web site on the basis of the information stored in a database that is updated in real-time. In case the e-commerce solution used by the seller has that kind of technology, the buyer will have a strong case to argue that the proposal on the site was indeed an offer tailored to her¹⁴³.

The example mentioned above assumes human/machine interaction and, therefore, may cause a problem: the page is dynamically built based on the information available at the time the buyer enters the seller’s web site, but the buyer may naturally take some time after the page is generated to decide whether to buy or not the goods there offered. In this circumstance, terms and conditions of use of the web site might provide that those offers expire after a short period of time, given the fact that a product offered might become unavailable while the prospective buyer decides whether to accept or not the offer. The rules of the CISG on withdrawal (Article 15(1)) are useless in this case¹⁴⁴, but the rules on revocation (Article 16) might play a significant role: the page generated might be programmed to be updated after some time; hence, if the page is updated and at that time the product becomes unavailable, the prospective buyer will receive a message on her computer screen stating that the product is no longer available (*i.e.*, that the offer is revoked, if it was revocable in the first place). That is not, however, an issue when the contract is formed during a machine/machine interaction based on instantaneous *inter praesentes* communication technologies, such as the case of an EDI arrangement with real-time connection and processing, since there is no delay for the offeree’s system to issue an acceptance.

¹⁴¹ See definition “2.1.1.2” in Part I.1.2 *supra*.

¹⁴² Or it will show product Z as being unavailable. In this case, it is reasonable to assume that, if the prospective buyer is still able to place an order, that such order will be an offer under the CISG (not the exhibition of product Z as unavailable), unless the terms and conditions of use of the web site provide otherwise (*i.e.*, the seller might be willing to assume the risk of the modification of the price).

¹⁴³ Compare with the UNCITRAL Draft Convention on Electronic Communications, *supra* note 48, at Article 11 (providing that “[a] proposal to conclude a contract made through one or more electronic communications which is not addressed to one or more specific parties, but is generally accessible to parties making use of information systems, including proposals that make use of interactive applications for the placement of orders through such information systems, is to be considered as an invitation to make offers, unless it clearly indicates the intention of the party making the proposal to be bound in case of acceptance”). The Draft Convention seems to disregard the possibility of concluding that a proposal made through a dynamic web site is an offer; the only exception is when the proponent clearly indicates her intention of being bound in case of acceptance.

¹⁴⁴ The reason why the rules on withdrawal are useless is because the offer in this situation reaches the offeree almost instantaneously, not leaving time for the withdrawal to reach “the offeree before or at the same time as the offer” (Article 15(2)).

Two important observations should be made: (a) under Article 14, the party making the proposal to conclude a contract might explicitly state that she does not intend to be bound in case the other party adheres to the proposal (such as in the terms and conditions of use of the web site); (b) proposals made on static (non-dynamic) web site, similarly to an advertisement in a newspaper, are presumed to be invitations to make offers. Indeed, it seems that the general principle (mentioned in Part III.2.1) for proposals made through a web site is focused on static (non-dynamic) web sites, where the analogy with an advertisement is perfectly appropriate.

In respect to the massive use of technologies that extend human capability to communicate, such as the case of an “e-mail merge”, there are some peculiarities too. It is clear that if a seller sends e-mails with her entire price list to all her clients, each data message will be construed as an invitation to make offers. However, there are more sophisticated applications for that technology. For instance, a seller might have an extensive database with a list of all its clients and all their recent purchases. With that information, if the seller decides to use it, computer software might create individualized e-mail messages for each customer. For instance, clients who purchased equipment X will receive a message with a proposal to buy a new accessory to that equipment (A_x), clients that bought equipment Y will receive proposals for accessory A_y and clients that have X and Y will receive proposals to buy both A_x and A_y ; based on the number of units of X and Y purchased in past transactions, the message might offer the exact corresponding number of units of accessories; the proposal might have discounts based on the number of past transactions or on the number units offered; older clients might receive an additional discount. In other words, the possibilities of customization might turn each message different from the others and the recipient of that message will have a strong argument to claim that the proposal met the specificity requirement of Article 14(1), unless the sender expressly indicates her intention of not being bound in case the recipient agrees to buy the products.

III.2.2. Reception theory: defining “reaching” in the e-commerce environment

When the parties communicate with each other through messages, they will be dealing with each other by distance (*i.e.*, not face-to-face) and there might be a delay in time from the moment the message is made and the time is ultimately understood by the recipient. Due to that, usually contract law defines the moment in which a communication becomes effective, *i.e.*, when it produces its effects. There are four options: (a) *information theory*, under which a communication becomes effective “once the recipient takes notice of the content of the communication”; (b) *reception theory*, under which a communication becomes effective “once the recipient has actually physically received the communication or it has at least been made available to it, even though it has not yet taken notice of the content”; (c) *postal or dispatch theory*, under which a communication is effective “once it has been posted or sent by the sender”; (d) *formulation theory*, under which a communication “becomes effective the moment that the responder begins to formulate its communication”¹⁴⁵. “Each of these approaches determines which of the parties carries the risk of a communication being lost, destroyed or damaged in the transition process”.¹⁴⁶ Roughly speaking, the CISG uses two of those options: the reception theory in respect to pre-contractual

¹⁴⁵ Siegfried Eiselen, *supra* note 119, at 24.

¹⁴⁶ *Id.* at 24.

communications (Part III.2.2.1) and the dispatch theory in respect to contractual communications (Part III.3.1); however, this separation is not strict: the CISG sometimes use the information and the dispatch theories for issues of formation and the reception theory for contractual communications.

III.2.2.1. Definition of “reaching”: interpreting Article 24 in analytical terms

Article 24 of the CISG provides that, for the purposes of the rules on formation of contract (Articles 14-23), an offer, acceptance or any indication of intention “reaches” the addressee when: (a) “it is made orally to him” or (b) “delivered by any other means to him” (b.1) in person, (b.2) “to his place of business or mailing address” or, (b.3) “if he does not have a place of business or mailing address, to his habitual residence”. The difference between ‘a’ and ‘b’ is whether the contract is concluded *inter praesentes* and *inter absentes*¹⁴⁷:

- a) In case of communication *inter praesentes* (situation ‘a’), there is no delay between the moment in which the “indication of intention” is issued and the moment it is noticed by the seller (e.g. negotiation face-to-face or by phone) and since there is no difference between the moment of receipt and the moment of cognizance, the *information theory* is accepted;
- b) In case of communication *inter absentes* (situation ‘b’), there is such a delay (e.g. offers or acceptances sent by regular mail) and the CISG places the risk of the communication on the sender by adopting the *reception theory*.

Therefore, there are two definitions of “reaches” in Article 24, depending on how the parties are communicating with each other. In case there is a delay between the instant when a message is issued and the moment when the seller takes notice of it (‘b’), it is sufficient that the message be delivered to the addressee’s “place of business or mailing address” (‘b.3’). Therefore, it is not required that the recipient takes notice of the message: what matters is the moment when the message arrives at the recipient’s place of business or mailing address. If the mailing address is no longer valid (e.g. the recipient changed her address without notifying the sender) it is irrelevant: once the message arrives at the no longer valid address it has “reached” the recipient under Article 24¹⁴⁸.

Among the provisions dealing with formation of the contract (Articles 14-23), there are seven rules using the expression “reaches” to determine the moment of effectiveness of (1) an offer, (2) a withdrawal of an offer, (3) a revocation of an offer, (4) a rejection of an offer, (5) an acceptance, (6) an instantaneous communication fixing period for acceptance and (7) withdrawal of an

¹⁴⁷ For the distinction between contracts *inter praesentes* and *inter absentes*, see note 5 *supra* and accompanying text.

¹⁴⁸ See *Tuzzi Trend Tex Fashion GmbH v. W.J.M. Keijer-Somers, Arrondissementsrechtbank [District Court] Amsterdam, Netherlands, 5 October 1994, Case Number H93.2900*, case abstract and comment available at <<http://cisgw3.law.pace.edu/cases/941005n1.html>> (last visited Apr. 17, 2005) (interpreting Article 24 as considering that a message has been received if it reaches the addressee’s invalid mailing address, but only in case the sender was not notified of the change of address). For a critical analysis of this decision, see Maria del Pilar Perales Viscasillas, *Comments on the draft Digest relating to Articles 14-24 and 66-70*, in *DRAFT UNCITRAL DIGEST AND BEYOND: CASES, ANALYSIS AND UNRESOLVED ISSUES IN THE U.N. SALES CONVENTION* 259, 283-84 (Franco Ferrari et al. eds., Munich, Sellier 2004) (stating that, although the application of Article 24 was mistaken in this case, the interpretation of this provision was nonetheless correct).

acceptance¹⁴⁹. The penultimate situation, dealt with in Article 20(1), will be examined separately in Part III.2.3 due to its peculiarities.

III.2.2.2. Using the principle underlying Article 24 to define “reaching” in e-commerce

There is clearly a gap in the CISG with regard to the definition of “reaching” for more modern technologies. However, gap-filling interpretation pursuant to Article 7(2) is relatively easy once the two major principles underlying Article 24 were identified¹⁵⁰. In order to transpose the definition of “reaching” to electronic commerce, the only thing that is required is to determine the technological equivalents of “cognizance” for the first principle (see item ‘a’ in Part III.2.2.1) and “delivery” for the second (see item ‘b’ in Part III.2.2.1).

III.2.2.2.1. Technological equivalent of “cognizance”

A technological equivalent of “cognizance” is required for the situations where information systems play an active role in the formation of contract, but only when the communication is made in real-time (instantaneous *inter praesentes*)¹⁵¹, regardless of whether the interaction is between machine/machine or between human/machine. That is the case when: (a) a person sends a message that is immediately received and processed by an information system, such as when a person makes an offer or an acceptance through a web site; (b) an information system sends a message that is immediately received and processed by another information system, such as in an EDI arrangement with real-time communication between the systems.

A technological equivalent for “cognizance” may be required in such circumstances because there will not be a human being reading the messages; rather, the computer system will receive and process the message. Due to that, equivalent of “cognizance” is “recording”, *i.e.*, when the message is stored by the information system and becomes available for processing. Whether the message is processed in a later moment is irrelevant; this situation is analogous to the one where a person receives an acceptance by phone and waits some time to take the initial steps towards performance of the contract: the contract would be formed at the moment that person heard the acceptance on the phone.

¹⁴⁹ See Articles 15(1), 15(2), 16(1), 17, 18(2), 20(1) and 22, respectively. For the same enumeration, see E. Allan Farnsworth, *Article 24*, in *BIANCA-BONELLI COMMENTARY ON THE INTERNATIONAL SALES LAW 201*, 201 (Cesare Massimo Bianca ed., Milan, Giuffrè, 1987), available at <<http://cisgw3.law.pace.edu/cisg/biblio/farnsworth-bb24.html>> (last visited Apr. 17, 2005). Article 21(2) also uses the expression “reached” but only to create an exception to the rule on effectiveness of acceptance in Article 18(2).

¹⁵⁰ Once those two principles are acknowledged, the CISG offers an excellent framework to electronic commerce. However, if updating the text becomes a possibility, it would be better to make the provision more clear for electronic commerce, in light of other developments achieved by the international community. In that respect, see Michael Joachim Bonell, *Do We Need a Global Commercial Code?*, 106 *DICK. L. REV.* 87, 92, n.24 (2001) (stating that the eventual “revised Articles 24 and 27 of the CISG, dealing with time and place of receipt and the transmission risk of declarations made by traditional means of communication, would require revision in light of Article 15 of the UNCITRAL Electronic Commerce Law, dealing with time and place of dispatch and receipt of data messages”).

¹⁵¹ Once there is a delay in the process of transferring the message, there is a risk that must be allocated. In such case, the notion that comes into play under Article 24 is the one of “delivery”.

In respect to technologies for instantaneous communications *inter praesentes* between two persons (e.g. text chats, Internet telephony), there is no need for a technological equivalent of “cognizance”. For instance, if Internet telephony is used, there is no difference from a regular phone call and thus the data message will “reach” the recipient as soon as it is orally made to her. As far as real-time text chats are concerned, each text message will “reach” the recipient when it is read by her.

III.2.2.2.2. Technological equivalent of “delivery”

A technological equivalent of “delivery” is required for technologies that extend human ability to communicate, in the cases of non-instantaneous communications (e.g. e-mail) and instantaneous communications *inter absentes* (e.g. fax). Also, a technological equivalent of “delivery” is required when information systems play an active role in the formation of the contract, but the communication technology is non-instantaneous, or it is instantaneous but *inter absentes*; one example is an EDI arrangement based on a “store and retrieve” mode¹⁵²).

As it was mentioned above, what matters for the purposes of Article 24 in case of communications *inter absentes* is whether the message is available at the recipient’s place of business or mailing address; the moment in which the recipient reads the message is irrelevant. In other words, a message “reaches” the recipient when it is her disposal¹⁵³. Therefore, to determine the technological equivalent of “delivery” one has to find the moment when the recipient is *able to retrieve* a data message. In general terms, it is possible to say that the recipient is able to do so when the message enters the information system under the control of the recipient¹⁵⁴, even if that system is maintained by a third party (e.g., an Internet access provider that gives its users mailboxes for e-mail messages). If the recipient has multiple information systems under his control and the message passes through all of them, the first to receive the message is the relevant one, even though the recipient might retrieve the message only from the last information system in the chain; the reason is that the message is under the sphere of control of (and therefore available to) the recipient when it enters her first information system.

Based on that, it is possible to say casuistically that: (a) a fax message reaches the recipient when it is fully transmitted to her fax device; (b) an e-mail message reaches the recipient when it enters the mailbox assigned to that electronic address, even if that mailbox is maintained by a third party; (c) in case of EDI in “store and retrieve” mode, the data message reaches the addressee in the moment it enters the mailbox that can be accessed by the recipient’s EDI system.

¹⁵² See note 9 *supra*.

¹⁵³ See Siegfried Eiselen, *supra* note 119, at 29 (stating that “[t]he principle underlying article 24 and aiding its interpretation, is the principle that any communications must either be received by the recipient personally (in the case of direct forms of communication) or must be effectively placed at its disposal at a place where it usually receives such communications or where it should expect to find communications in the normal course of business”).

¹⁵⁴ In that aspect, see UNCITRAL MLEC, *supra* note 67, at Articles 15(2)(a)(i) (providing that “if the addressee has designated an information system for the purpose of receiving data messages, receipt occurs: (i) at the time when the data message enters the designated information system”) and 15(2)(b) (providing that “if the addressee has not designated an information system, receipt occurs when the data message enters an information system of the addressee”). See also UNCITRAL Draft Convention on Electronic Communications, *supra* note 48 at Article 15(2) (providing that “[t]he time of receipt of an electronic communication is the time when it becomes capable of being retrieved by the addressee at an electronic address designated by the addressee” and that “[a]n electronic communication is presumed to be capable of being retrieved by the addressee when it reaches the addressee’s electronic address”).

Of course, if a data message is not comprehensible by the recipient (e.g., it is scrambled) or is not capable of being processed by the offeror's information system, the content of the message will not be effective. In this area, it is possible to make an analogy with the decisions regarding standard contract terms submitted in a language different from the one used during the negotiations¹⁵⁵.

III.2.3. Time to issue an acceptance: Article 20(1)

In case the offeror sets in the offer a certain period of time for the recipient to accept it, one has to determine the moment in which that period begins to run. For that purpose, the CISG has rules different from the ones contained in Article 24. Article 20(1) includes two different rules for that situation:

- a) "A period of time for acceptance fixed by the offeror in a *telegram or a letter* begins to run from the moment the telegram is handed in for *dispatch* or from the date shown on the letter or, if no such date is shown, from the date shown on the envelope".
- b) "A period of time for acceptance fixed by the offeror by *telephone, telex or other means of instantaneous communication*, begins to run from the moment that the offer *reaches* the offeree".

The criterion for differentiation is no longer whether the communication is *inter praesentes* or *inter absentes*, but rather whether it is instantaneous or not; the CISG even uses the expression "means of instantaneous communication". If the communication is non-instantaneous (the examples presented by the CISG are telegram and letter), the period of time for acceptance runs from the *dispatch* of the message, whereas if the communication is instantaneous (the examples presented by the CISG are telephone and telex) the period of time for acceptance runs from the *reception* of the message.

The rationale behind Article 20(1) is merely evidentiary: it favors the dispatch because it is generally easier to prove the time of dispatch with reasonable certainty¹⁵⁶. When the dispatch and receipt are simultaneous (as is in the case of instantaneous communications), Article 20(1) adopts the receipt theory. In fact, it should be noted that the CISG could have simply provided that time for acceptance begins to run from the time of dispatch, without expressly making the differentiation between instantaneous and non-instantaneous communications: if the communication is instantaneous, the moment in which the message is dispatched and the

¹⁵⁵ See *inter alia* Landgericht [District Court] Heilbronn, Germany, 15 September 1997, Case Number 3 KfH O 653/93, available at <<http://cisgw3.law.pace.edu/cases/970915g1.html>> (last visited Apr. 18, 2005) (holding, based on Article 8, that, because the general terms and conditions prepared by the seller were not in the language of the negotiation, they were not enforceable against the buyer).

¹⁵⁶ See E. Allan Farnsworth, Article 20, in BIANCA-BONELLI COMMENTARY ON THE INTERNATIONAL SALES LAW 185, 186 (Cesare Massimo Bianca ed., Milan, Giuffrè, 1987), available at <<http://cisgw3.law.pace.edu/cisg/biblio/farnsworthbb20.html>> (last visited Apr. 18, 2005). Nevertheless, it has been already argued that Article 20(1) causes an internal inconsistency within the CISG: "[i]f the offer [under Article 15(1)] is not effective until it reaches the offeree, why should the time stated in the offer begin to run upon dispatch or the time on the letter or envelope?"; see John E. Murray Jr., *An Essay on the Formation of Contracts and Related Matters under the United Nations Convention on Contracts for the International Sale of Goods*, 8 J.L. & COM. 11, 20-21 (1988).

moment the message is received are obviously the same. Hence, an identical result could have been achieved with fewer words.

It should be noted that the second part ('b') of Article 20(1) does not contain a gap: the clause "or other means of instantaneous communication" permits that new technologies classified as of instantaneous communication to fit in that rule and, accordingly, be subject to the receipt theory. That is the case of fax, text chats, Internet telephony and EDI with real-time connection. In respect to instantaneous communications *inter praesentes* (all the above except fax and EDI with real-time connection but delayed processing), if the offer does not contain a period of time for acceptance, the final rule contained in Article 18(2)¹⁵⁷ applies: the offeree must accept the offer immediately¹⁵⁸.

By exclusion, it is possible to include the more modern means of non-instantaneous communication – such as e-mail¹⁵⁹ and EDI without real-time connection – in the first part ('a') of Article 20(1); therefore, the beginning of the period of acceptance of an offer communicated by these methods is subject to the dispatch rule¹⁶⁰. However, since the purpose of Article 20(1) is merely evidentiary, one might be able to argue that, when new non-instantaneous technologies are used, the initial date of the period of acceptance will be the dispatch if it can be demonstrated more easily than the receipt of the message.

In any event, the party making the offer may under Article 6 derogate the effect of Article 20(1) by stipulating in it the initial date from which the period for acceptance begins to run¹⁶¹; for instance, an e-mail with "[a] statement such as 'You may accept this offer within ten days after this offer reaches you' would override the interpretive rule of Article 20(1)"¹⁶².

III.3. Contractual Communications

Once the contract is formed, the parties may continue to interact with each other by electronic means. Many of the substantive provisions dealing with obligations of the parties and other matters (Articles 25-88) require that one party communicates a given fact to the other one; for instance, to rely on the lack of conformity of the goods, the buyer must give the seller notice of the non-conformity¹⁶³. Since the principle of informality is also extended to these provisions of the

¹⁵⁷ In its last sentence, Article 18(2) provides that "[a]n oral offer must be accepted immediately unless the circumstances indicate otherwise

¹⁵⁸ In that respect, see *CISC-AC I supra* note 112 at ¶ 18.4.

¹⁵⁹ See *id.* at ¶ 20.3 (stating that "[e]-mail is not instantaneous communication and, with respect to dating, it is not wholly equivalent to letters sent in envelopes" and, therefore, "[a] period of time for acceptance fixed by the offeror in e-mail communication begins to run from the time of dispatch of the e-mail communication". But see Siegfried Eiselen, *supra* note 119, at 30 (stating that e-mail is a form of instantaneous communication).

¹⁶⁰ On the definition of the moment in which a message can be deemed to be "dispatched", see Part III.3.1 *infra*.

¹⁶¹ See E. Allan Farnsworth, *supra* note 156, at 187.

¹⁶² John O. Honnold, *supra* note 45, at § 171, 193.

¹⁶³ CISG Article 39. There are several other examples: Articles 26 (declaration of avoidance), 32(1) (notice of consignment specifying the goods in case they are not marked – see also Article 67(2)), 32(3) (buyer's request for information in order to enable her to effect insurance), 43 (notice of a third-party claim), 46(2) (request for replacement of the goods), 46(3) (request for repair of the goods), 47(2) (notice by the seller that she will not perform within the period set by the buyer), 48(2) (3) (4) (request by the seller to remedy the failure to perform her obligations), 63(2) (notice by the buyer that she will not perform within the period set by the seller), 65(1) (request by the seller to the buyer to specify the form, measurement and other features of the goods), 65(2)

CISG (see Part III.1.1 *supra*), it is clear that all those interactions can be made through electronic means. The issue, as it was in Part III.2.2 in respect to matters of formation of the sales contract, is to determine which party bears the risk in case the communication fails, a topic to be explored in Part III.3.1. Also, there is another kind of contractual communication not related to the performance of the obligations by the parties, but rather the eventual modification or termination of the agreement; this issue will be examined in Part III.3.2.

III.3.1. Errors in communication: dispatch theory in Article 27

Article 27 states the general rule on allocation of risks of delays or errors in contractual communications. It provides that: “[u]nless otherwise expressly provided in this Part of the Convention, if any notice, request or other communication is given or made by a party in accordance with this Part and by means appropriate in the circumstances, a delay or error in the transmission of the communication or its failure to arrive does not deprive that party of the right to rely on the communication”¹⁶⁴. By providing that a party might still rely on the communication even if there is delay or error in the transmission (or if it fails), Article 27 adopts the dispatch theory as a general rule¹⁶⁵. The idea that underlies Article 27 is that the party who should bear the risk of transmitting the message is the “one who, as a result of his deviation from normal performance, caused the statement to be sent”¹⁶⁶. For instance, if the reception theory were adopted, an error in transmitting the buyer’s notice that the goods are non-conforming (Article 39) would deprive the innocent party (buyer) of the right of relying on the non-conformity¹⁶⁷. However, there are a few exceptions to this rule, as it can be inferred from the wording of Article 27.

III.3.1.1. Exceptions to the dispatch rule

The first clause in Article 27 states: “[u]nless otherwise provided”. Indeed, in the third part of the CISG there are several provisions that condition the effectiveness of a notice, request or communication to the *receipt* by the addressee. Those provisions are Articles 47(2) (notice by the seller that she will not perform within the period set by the buyer), 48(4) (request by the seller to remedy the failure to perform her obligations), 63(2) (notice by the buyer that she will not perform within the period set by the seller), 65(1) (request by the seller to the buyer to specify the form, measurement and other features of the goods), 65(2) (communication of the specification of the goods made by the seller) and 79(4) (notice of an impediment to the performance of the contract). The issue here is how to define *receipt*, since the applicability of the definition of “reaches”

(communication of the specification of the goods made by the seller), 71(3) (notice of suspension of performance), 72(2) (notice of intention of declaring the contract avoided), 79(4) (notice of an impediment to the performance of the contract) and 88(1) (2) (notice of intention to sell the goods by the party bound to preserve them).

¹⁶⁴ See Oberlandesgericht [Provincial Court of Appeal] *Naumburg*, Germany, 27 April 1999, Case Number 9 U 146/98, available at <<http://cisgw3.law.pace.edu/cases/990427g1.html>> (last visited Apr. 19, 2005) (stating that “[t]he sender may rely on the original content of his communication as long as he sent the notice by means appropriate in the circumstances, even if it reaches the addressee too late, altered or not at all”; the court found, based on the testimony of a witness, that an effective notice declaring a contract avoided was sent).

¹⁶⁵ See Siegfried Eiselen, *supra* note 119, at 32.

¹⁶⁶ See Peter Schlechtriem, *supra* note 82, at 62.

¹⁶⁷ See John O. Honnold, *supra* note 45, at § 189, 217.

contained in Article 24 is limited by the text of this provision to issues of formation; however, it is contended that the Article 24 definition is also applicable to these exceptions¹⁶⁸.

The other exception lies on the “appropriateness of the means” test. Under Article 27, in case of delay, error or failure, the party sending the notice, request or communication may only rely on it if she has used the “means appropriate in the circumstances”¹⁶⁹. The availability of electronic means of communication is a potential source of complications in determining the appropriateness of the means selected¹⁷⁰; however, in the absence of agreement or practices between the parties, it is very difficult to set *a priori* some guidelines to determine what will be appropriate in a real case. For instance, it is not clear that the mere availability of a faster means of communication would render inappropriate the choice of a slower one.

III.3.1.2. Dispatch of electronic communications

The CISG does not define dispatch, not even for more traditional means of communications, such as letters, telegrams and telexes. But since Article 27 uses the expression “transmission”, it is possible to infer that a message can be deemed to be sent when it leaves the sphere of control of the seller¹⁷¹. This definition has the advantage of being symmetrical to the definition of “reaches” for non-instantaneous and instantaneous *inter absentes* communications (see Part III.2.2.2.2 *supra*): if a message is received when it enters the sphere of control of the recipient, it is logical to assume that it is sent when it leaves the sphere of control of the sender.

Therefore, a letter is dispatched when it is given to the postal service. Similarly, if the sender uses an information system to send it, an electronic message is deemed to be dispatched when it leaves that information system and enters a network over which she has no control¹⁷². Of course, in order to be effective, the message should be able to reach the addressee; for instance, if the sender types the wrong e-mail address of the recipient, the former will not be able to rely on that message.

¹⁶⁸ See E. Allan Farnsworth, *supra* note 149, at 203-204 (stating that “the analogy between the time when a communication ‘reaches’ an addressee under Part II and the time when there is ‘receipt’ of a communication under Part III is striking”, which justify extension of the principle of Article 24 to Part III). See also John O. Honnold, *supra* note 45, at § 179, 202.

¹⁶⁹ See *Landgericht [District Court] Stendal*, Germany, 12 October 2000, Case Number 22 S 234/94, available at <<http://cisgw3.law.pace.edu/cases/001012g1.html>> (last visited Apr. 19, 2005) (stating that “[a]s soon as [one party] has made the decision to suspend her performance, she is bound to inform the other party without delay, which regularly requires an appropriate sending of the notice as stipulated by Art. 27 CISG”).

¹⁷⁰ In that respect, see Henry Deeb Gabriel, *General provisions, obligations of the seller, and remedies for breach of contract by the seller*, in DRAFT UNCITRAL DIGEST AND BEYOND: CASES, ANALYSIS AND UNRESOLVED ISSUES IN THE U.N. SALES CONVENTION 336, 342-43 (Franco Ferrari et al. eds., Munich, Sellier 2004).

¹⁷¹ *But see id.* at 342 (stating that the solution of problem of determining “whether there has been in fact a ‘dispatch’ [...] is not within the domain of the CISG, but instead must be resolved by the slow emergence of international uniform standards for electronic commerce on such questions as what constitutes ‘receipt’”).

¹⁷² In that aspect, see UNCITRAL MLEC, *supra* note 67, at Article 15(1) (providing that “[u]nless otherwise agreed between the originator and the addressee, the dispatch of a data message occurs when it enters an information system outside the control of the originator or of the person who sent the data message on behalf of the originator”). See also UNCITRAL Draft Convention on *Electronic Communications*, *supra* note 48 at Article 10(1) (providing that “[t]he time of dispatch of an electronic communication is the time when it leaves an information system under the control of the originator or of the party who sent it on behalf of the originator or, if the electronic communication has not left an information system under the control of the originator or of the party who sent it on behalf of the originator, the time when the electronic communication is received”). Specifically in respect to fax messages, see Ericson P. Kimbel, *Nachfrist Notice and Avoidance under the CISG*, 18 J.L. & COM. 301, 314 (1999) (concluding that a buyer could rely on immediate effectiveness of a Nachfrist notice – which is governed by Article 47 – “when the fax machine has confirmed transmission”).

However, unlike the receipt theory, if the message is not comprehensible or unable of being processed by another information system due to a failure in the transmission process, the sender will nevertheless be able to rely on it¹⁷³.

III.3.2. Modification or termination of the contract

Article 29(1) provides that “[a] contract may be modified or terminated by the mere agreement of the parties”. Therefore, the same informality that governs the formation of the contract under Article 11 will rule its eventual modification or termination: the parties may modify or terminate the contract by any means, even orally¹⁷⁴. Similarly to what has been claimed in Part III.1.1, the absence of form requirements permits the parties to modify and terminate a sales contract via electronic communications. If the parties provide in their agreement that the contract may only be modified in writing (Article 29(2)), the contract may be modified by electronic means, unless the parties define “writing” differently from the concept examined in Part III.1.2.1.

In case the domestic law of Contracting State that made an Article 96 reservation is applicable, there will be an issue whether the definition “writing” in Article 13 would play any role in determining what kind of “writings” would meet the domestic writing requirement; as it was claimed in Part III.1.2.2, Article 13 may supersede the definition of “writing” contained in the domestic law of the reserving State.

¹⁷³ The dispatch theory allocates the risk of the failure in *transmission*. There are situations when a data message will be properly transmitted, but still will not be readable, a risk that is not allocated to the recipient under the dispatch theory. Thus, If the sender chooses a means of communication that issues messages that the recipient is not able to read (because, say, the latter does not have a required computer application), the risk is still on the sender by virtue of the exception of Article 27; the reason is that the choice of a means that results in a message unreadable to the recipient is not “appropriate” (see *supra* Part III.3.1.1). However, a good faith recipient will always advise the sender that the message could not be read (if, of course, the recipient can identify the sender).

¹⁷⁴ See *NV A.R. v. NV I., Hof van Beroep* [Appellate Court] *Gent*, Belgium, 15 May 2002, Case Number 2001/AR/0180, available at <<http://cisgw3.law.pace.edu/cases/020515b1.html>> (last visited Apr. 19, 2005) at ¶ 6.6 (stating that “any agreement, regardless of the form in which it came about, can in principal be changed or ended by the mere agreement of the parties, which may be proved by any means, including the behavior of the parties themselves”).

IV. CONCLUSION

Based on the analysis made in Part II, the use of electronic means by itself does not turn the CISG inapplicable, with one exception. Even if those means are used, it is still possible to determine the parties' places of business using the guidelines already settled by case-law and scholarly writing, which is essential to determine the internationality of the contract as well as whether it falls into the personal sphere of application of the Convention (Part II.1.2). There might be some difficulties in respect to the requirement of *apparent* internationality (Part II.1.3), which often also exists for transactions concluded by more traditional means. One problem is the definition of parties to the sales transaction (Part II.1.4), a matter not governed by the CISG and thus left to domestic law applicable under the conflict of laws rules of the forum; however, since it is extremely improbable that any jurisdiction will grant the status of "parties" to electronic agents, this problem is not in fact relevant.

A more relevant issue deals with the CISG's substantive sphere of application. Due to the definition of "goods" and "contract of sale", the Convention is not applicable to contracts whose characteristic performance is made by electronic means, such as the supply of software or other digital content over the Internet (Part II.2.2). That is one situation where the use of the technology by itself turns the Convention inapplicable: for instance, the CISG can be applicable when standard software is distributed in tangible media, but not when it is provided over the Internet. However, it is not clear whether the CISG is indeed suitable to those transactions or whether new specific rules should be developed; furthermore, since in this kind of transactions the parties usually agree on detailed conditions for their relationship (under the form of a "license agreement"), a set of default rules such as the CISG might be of questionable use.

As a result of the potential lack of personal contact in the e-commerce environment, the exclusion of consumer sales from the sphere of application of the CISG is also a potential problem, since it will be difficult for the seller to know whether the buyer is a consumer (Part II.2.3) or not. The risk, however, is not a limitation on the applicability of the CISG, but rather an expansion of its sphere of application to consumer sales, since there is a higher probability (in comparison to traditional transactions) that the seller did not know nor ought to have known of the consumer purpose of the buyer.

The analysis in Part III demonstrated that the substantive provisions of the CISG can also be applicable to electronic communications. Based on the principle of informality, a contract might be formed (Part III.1.1), modified or terminated (Part III.3.2) by electronic means. Furthermore, a definition of "writing" can be derived from Article 13, which clearly encompasses the more modern means of communication mentioned in this paper (Part III.1.2). This definition might override a conflicting one contained in the domestic law applicable due to an Article 96 reservation, giving the parties certainty that, even if one of them is from a reserving State and that State's law would be applicable by virtue of conflict of laws rules, they can rely on the definition of writing implicit in the CISG.

Moreover, the provisions of the CISG dealing with formation of contracts can also be applied to e-commerce. The definition of offer contained in Article 14 addresses relevant issues arising from electronically generated proposals (Part III.2.1). Article 24, which defines the moment in which a pre-contractual communication produces its effects, can also be applied to electronic

communications, once the technologies are properly categorized and technological equivalents for the concepts of “cognizance” and “receipt” are derived from the text of the Convention (Part III.2.2). The same happens with Article 20(1), which defines the moment in which time limit to issue an acceptance begins to run (Part III.2.3). Finally, Article 27, which deals with the risk of errors in the transmission of a contractual communications, can also be applicable to e-commerce environment once a technological equivalent of “dispatch” is developed.

Therefore, it is possible to say that (a) the CISG can be applicable to e-commerce transactions and (b) the CISG provisions dealing with formation of the contract and contractual communications are perfectly suitable for the e-commerce environment. Consequently, it is clear that the CISG provides a workable framework for international e-commerce transactions involving sale of goods; the difficulties that may arise are not sufficient to set aside the conclusion that the Convention is able to deal with emerging issues in e-commerce.

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