The only way parties can avoid this social media trap is to rule out any of this communication as evidence of binding intention pursuant to the CISG by means of an express contract clause. Alternatively, parties must let it flow and accept the risk!

4.4 SUMMARY AND OUTLOOK

The digital revolution and the internet have finally reached every day life. Communications via the internet rule our daily lives. There is hardly any distinction any more between direct communications via emails and indirect via social media. Additionally, the borderline between the private sphere of persons and their professional sphere is dwindling away. This also affects the form of communication utilized for contracts and contractual communications in international sale of goods.

These informal communications create uncertainties. The CISG generally favours no form (Art. 11), except for those eight Contracting States that have declared an Article 96 reservations.[13]

However, the crux of the answer to these uncertainties lies within the flexible norms of the CISG, which allow parties to create their own forms of communication via practices or usages, or even indirectly via usages of trade (Arts. 8 and 9 CISG).

In the absence of any strict norms prescribing the form of a notice, it can be assumed that quick messages via social media platform, even after usual business hours, can be taken by courts as binding representations or statements by the party in question.

It depends ultimately on the court or arbitration tribunal as to how to evaluate such evidence, *i.e.*, whether a social media 'tweet' can be attributed to one contractual party as the sender, and whether it was received by the other contractual party.

Yet in any case, the sheer existence of a social media message shifts the burden of proof to the other party attempting to deny its receipt. On the other hand, it might remain risky to rely solely on social media communication. If the court is not satisfied with the evidence of notification, the legal consequences can be severe, *e.g.*, Article 39 CISG.

If parties to an international sales contract wish to avoid any legal uncertainty regarding social media, they should either expressly 'opt out' of social media in accordance with Article 6 CISG,[14] by either expressly defining permissible types of communication for contractual notifications, and/or expressly ruling out any kind of social media communication.

13 *See supra* note 7.

14 Also, opting-in is permitted as a 'positive mirror image' of Art. 6 CISG which only deals with the opting out, provided that the international sphere of application in Art. 1 CISG is met. *See* M.G. Larson, 'Applying Uniform Sales Law to International Software Transactions', *Tulane Journal of International and Comparative Law*, Vol. 5, Spring, 1997, p. 451 with further references. In the case of an opting in, however, the traditional

5 ELECTRONIC COMMUNICATIONS: SHOULD CISG ADVISORY COUNCIL OPINION NO. 1 (2003) BE UPDATED?*

*Cesar Pereira*** *and Ana Julia Moniz de Aragão****

5.1 INTRODUCTION

Some facts and figures may help us understand the current technological context of international trade and how it has become increasingly affected by electronic communications over the past few years.

In 2003, some of today's main social network systems – Facebook, WhatsApp, Twitter, Skype and Instagram – did not exist. LinkedIn had just been created, and had 92,000 users. Facebook alone now has over 1.4 billion users, and even the much less popular LinkedIn has more than 93 million users. Common applications such as mobile internet access, touch-screen devices, Cloud, Kinect, SmartTVs and 3D printers were unheard of in 2003.[1]

In the third quarter of 2014, 301 million smartphones were shipped worldwide. In 2016, it is expected that nine out of ten mobile phones will be smartphones.[2] In 2020, at

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1 The authors thank Justen, Pereira, Oliveira & Talamini's Information Technology department for the compilation of this data from various sources.

2 J. Rivera & R. Meulen, *Gartner Says Sales of Smartphones Grew 20 Percent in Third Quarter of 2014*,

any given moment, there will be at least 20 billion devices connected to the internet. Furthermore, in 2011 95% of all information was in digital format, and most of it was accessible on the internet or through other computer networks.[3] The phrase *e-commerce* is gradually being replaced by *m-commerce* as transactions are becoming distinctively mobile. Regarding social networking, in 2009 there were already more social networking services (SNS) than e-mail users – a figure that has only increased.

The internet has most certainly changed the way the world does business. It is glaringly obvious for everyone willing to see – from the captivating sharing-community and the futuristic means of mobile payment, to the arising opportunities that bring former outsiders to the table of international commerce. In addition, the internet has also significantly altered the meaning of borders and the means of interaction. Despite many silver linings, as an almost natural consequence, the usages and practices of international trade have been left trailing behind.

This could have never been foreseen at the time the CISG was drafted. In 1980, the internet was still a military tool and had not yet been expanded worldwide. In this sense, as remarked by Davies and Snyder, that Article 13 CISG provides that telegrams and telexes meet the requirement of 'writing' seems comical nowadays.[4] In a society marked by intensive electronic communication through a variety of means and applications, the forms of communication mentioned in Article 13 belong in museum collections rather than in international sales.

Given this framework, it is almost surprising that in 2003 the CISG Advisory Council reached such lasting conclusions as those set forth in Opinion No. 1. Even in such a different technological context, the CISG Advisory Council adopted guidelines that are still useful in addressing some of the most pressing problems of e-commerce within the CISG.

The purpose of this chapter is to analyze the legal aspects of electronic communications in the application of the CISG. In order to achieve this goal, it takes the very successful Opinion No. 1 as a model and structure against which new rules and technical developments can be compared and understood. In a way, Opinion No. 1 is a proxy for analysis of the topic of e-communications within the CISG in general. The chapter finally draws conclusions about what has evolved beyond the reach of Opinion No. 1. Moreover, it shows how the foresight of the CISG Advisory Council in 2003 still makes Opinion No. 1 useful in practice, even after such dramatic technological changes.

3 M. Hilbert & P. López, 'The World's Technological Capacity to Store, Communicate, and Compute Information', *Science*, Vol. 332, No. 6025, 2011.

4 M. Davies & D.V. Snyder, *International Transactions in Goods: Global Sales in Comparative Context*, Oxford University Press, Oxford, 2014, p. 154 ('The quaint, concise seriousness of CISG Article 13 appears almost comical now; perhaps its ill fate was destined by its article number. "For the purposes of this Convention", it solemnly declares, "writing includes telegram and telex". We suspect few practicing lawyers have ever

5.2 CISG Advisory Council Opinion No. 1

It is widely known that the CISG nor any other uniform law cannot by itself promote uniformity. In order to achieve its purpose and truly overcome legal barriers, it must be interpreted and applied in a uniform way. As stated by Professor Schlechtriem, this task requires the discipline of an orchestra with a conductor.[5]

Bearing this in mind, in 2001 the CISG Advisory Council was established. This private initiative gathers prominent CISG scholars and aims to protect 'the paramount regard to international character of the Convention and the need to promote uniformity'[6] by publishing opinions regarding controversial issues.[7]

Upon a request from the International Chamber of Commerce regarding issues of electronic communications and the flexibility of the CISG towards them,[8] the CISG Advisory Council circulated its first opinion in 2003. This opinion had as Rapporteur Christina Ramberg, and was entitled 'Electronic Communications under CISG' (Opinion No. 1).[9] It touched upon the interpretation of certain language in the CISG that had become rather blurred due to internet innovations. Some of these were expressions such as 'dispatch', 'notice', 'reaches', 'writing' and 'oral'.[10]

The subject matter was clearly justified. At the time the CISG was drafted, modern means of communication corresponded to telegrams and the then leading-edge facsimile. In 2003, in a world already encompassed by the electronic communications revolution, the interpretation of the CISG's last-century language demanded some guidance in order to safeguard its uniform application.[11]

Technology is ever changing at an almost unfathomable speed. The reality regarding electronic communication in 2003 was significantly different from the reality of today. Any guidelines in the realm of e-communication are bound to quickly become obsolete. It says a great deal for Opinion No. 1 that it is still currently applicable in many instances.

5 P. Schlechtriem, 'Uniform Sales Law in the Decisions of the *Bundesgerichtshof*', *50 Years of the Bundesgerichtshof [Federal Supreme Court of Germany]: A Celebration Anthology from the Academic Community*, 2002, available at: <www.cisg.law.pace.edu/cisg/biblio/schlechtriem3.html>.

6 CISG Advisory Council, *Welcome to the CISG Advisory Council*, available at <www.cisgac.com>.

7 J.D. Karton & L. Germiny, 'Has the CISG Advisory Council Come of Age?', *Berkeley Journal of International Law*, Vol. 27, No. 2, 2009, p. 451, available at <http://scholarship.law.berkeley.edu/bjil/vol27/iss2/4>.

8 L. Mistelis, *CISG-AC Publishes First Opinions*, 26 March 2008, available at <www.cisg.law.pace.edu/cisg/CISG-AC.html>.

9 CISG Advisory Council, 'Opinion No. 1 – Electronic Communications Under CISG', 2003, Rapporteur: Professor Christina Ramberg (Opinion No. 1).

10 F. Yang, Interview with Professor Jan Ramberg: *CISG-AC – Offering Worldwide Authoritative Opinions for the Uniform Application and Interpretation of the CISG*, November 2005, available at <www.cisgac.com/default.php?ipkCat=149&sid=149>.

11 I. Schwenzer, 'The CISG Advisory Council', *Nederlands Tijdschrift voor Handelsrecht*, No. 2, 2012, pp. 547-

Against this background, one may take one of three positions towards Opinion No. 1. To some extent, these possible approaches reflect various views regarding the CISG itself. A possible view advocates that Opinion No. 1 is problematic and should be repealed or updated. Another possible approach argues Opinion No. 1 is insufficient to deal with today's issues but can be complemented by scholarship and case law. A third possible position claims Opinion No. 1 contains the necessary general guidelines to deal with all of today's relevant issues, and that this is reflected by scholarly writings and case law.

5.3 OPINION NO. 1 IN DETAIL

Opinion No. 1 analyzes 24 different articles of the Convention, the interpretation of which, in the opinion of the CISG Advisory Council, was affected by issues arising from electronic communication. However, seven main issues can be discerned therein.

The Opinion mostly deals with the interpretation of specific terms present in the CISG that are especially affected by electronic communications, such as 'writing', 'reaches', 'dispatch', 'notice' and 'oral'.

The principle of freedom of form, expressed in Article 11 CISG, is widely known. According to the Opinion, based on the CISG references to telegram and telex in Article 13, an electronic communication will be in 'writing' if it is able to fulfil the same functions as a paper-based communication. Bearing this in mind, the guideline provides 'the term "writing" in CISG also includes any electronic communication retrievable in perceivable form'.

The Opinion also highlights the concept of 'writing' may be directly (Art. 6 CISG) or indirectly (Art. 9 CISG) limited and, further, this guideline does not intend to disturb the effects of declarations pursuant to Article 96.

As to the meaning of 'dispatch' and 'reaches', the Opinion deals with the interpretation of Articles 15(1) and (2), 16(1), 17, 18(2), 19(2), 20(1), 21(1) and (2), 22, and 24. Pursuant to Opinion No. 1, a communication is 'dispatched' when it leaves the sender's server. It is 'reached' when the communication enters the recipient's server.

Regarding the latter, it is important to distinguish between the moment when the message reaches, *i.e.*, enters the recipient's server and becomes accessible to him, from the moment when the recipient actually reads or listens to it. As remarked upon in the Opinion, this is the distinction between 'reach the desk' and 'reach the mind'.[12] Only the former is indeed relevant to the CISG since it is based on objective criteria and thus, easier to demonstrate.

The interpretation proposed for the term 'notice' raises few issues. It merely states that 'notice' includes electronic communications. In this regard, like 'notice', the 'request and other communications' and the act of specification mentioned respectively in Articles 27 and 65 CISG can be done through electronic communications.[13] This interpretation was adopted in the *Delizia v. Columbia Distributing Company*.[14] Therein, a US Federal District Court expressly made reference to Opinion No. 1 in order to emphasize that the aggrieved party could have notified the breaching party via e-mail.

The last term interpreted by the Opinion is 'oral'. This term includes 'electronically transmitted sound and communications in real time'.[15] Electronic communications in real time correspond to the means of communication by which the parties interact in real time, either by sound or typed letters.

Due to this equivalence, electronic communications in real time are to be accorded the same treatment as oral communications. Therefore, an offer made over a chat forum, which is considered an electronic communication in real time, must be accepted immediately, in light of Article 18(2) CISG.

Besides the meaning of the terms mentioned, there is one very distinctive general rule that is constantly repeated in the Opinion. It concerns consent to receive electronic communications. In order to grant an electronic communication legal effect, the recipient must have consented to receive electronic communications 'of that type, in that format and to that address'.[16]

Let us contemplate this rule with the following example: a buyer has sent an offer by 'snail mail'. It later decides to withdraw its offer and sends an e-mail that, complying with Article 15(2) CISG, enters the seller's server – *i.e.*, reaches the seller – before the offer. In this example, if the seller has not – explicitly or implicitly – expressed its consent to receive electronic communications, the offer will not have been effectively withdrawn, since the communication of withdrawal will not be enforceable. The same result applies if the sender directs the communication to a different address or by another means of electronic communication that was not agreed upon.

To conclude the analysis of the Opinion, there is one more specific rule that should be mentioned. Under Article 20(1) CISG, prescribes different 'day ones' for the time calculation of the period for acceptance, depending upon the means of communication used. When the offer is conveyed in a letter or telegram, the period of time for acceptance begins to run from the moment it is handed in for dispatch – or the date on the envelope.

13 *Id.*, *Rule*, on Arts. 27 and 65 CISG.

14 *La Delizia Friulani la Delizia, S.C.A.R.L. v. Columbia Distributing Company, Inc. et al.*, US District Court (Washington), 9 September 2004, available at <http://cisgw3.law.pace.edu/cases/040909u1.html>.

15 CISG Advisory Council, *supra* note 9, *Rule*, on Arts. 18(2), 19(2), 21(1), 21(2) and 24.

16 *Id.*, *Rule*, on Arts. 15, 16(1) and 67. Whether the recipient has consented or not is a matter to be dealt pursuant

Nonetheless, if the offeror fixes the period by telephone, telex or by other means of instantaneous communication, the counting starts when it reaches the offeree – *i.e.*, immediately.

In this sense, Opinion No. 1 substantially equates e-mails to letters or telegrams, and includes chatting programs within the category of 'other means of instantaneous communication'.[17] The consequences of this assimilation directly affects the time calculation.

Therefore, whereas the period of time for acceptance of an offer conveyed via an e-mail starts to run from the moment of its dispatch,[18] regarding real time chatting messages, the offeror must accept immediately.[19]

5.4 BEYOND THE CISG AND OPINION NO. 1

The CISG Advisory Council was not isolated in its concern regarding electronic commerce and communications. In fact, the pioneering initiative had already been taken by UNCITRAL in the early 1990s, when UNCITRAL engaged itself in the drafting of a model law on the subject. The result of four years of preparatory work was the UNCITRAL Model Law on Electronic Commerce (MLEC).[20] It consists of a set of principles aimed at providing an internationally accepted legal framework in the matter of electronic commerce, and consequently, seeks to set aside legal obstacles to international trade. It has successfully served as an initial basis for domestic legislation and for further harmonization.

There are three main principles promoted by the MLEC: the principles of non-discrimination, technology neutrality and functional equivalence. The principle of non-discrimination states that the mere fact that a document is in an electronic form will not be sufficient to taint its validity or enforceability. The principle of technology neutrality provides the detachment of rules from the type of technology employed. Lastly, the functional equivalence principle describes the requirements under which electronic communication legally is equivalent to paper-based communication.

As mentioned, a number of countries have adopted domestic legislation based on MLEC,[21] for example: the 1999 US Uniform Electronic Transactions Act (UETA),[22] the

17 *Id.*, *Comments*, para. 20.3.

18 *Id.*, *Comments*, para. 20.3.

19 *Id.*, *Comments*, para. 20.5.

20 *UNCITRAL Model Law on Electronic Commerce with Guide to Enactment 1996*, GA Res 51/162, UN Doc. A/51/162 (MLEC).

21 According to UNCITRAL, '[l]egislation based on or influenced by the Model Law has been adopted in 65 States', such as Australia, Canada, China, India, Mexico, New Zealand, Republic of Korea, Saudi Arabia, South Africa, United Kingdom. *See* UNCITRAL, *Status: UNCITRAL Model Law on Electronic Commerce*, available at <www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/1996Model_status.html>.

22 *Uniform Electronic Transactions Act*, adopted 30 July 1999, National Conference of Commissioners on Uniform State Law (NCCUSL) (United States of America). *See* J.A. Puplava, 'Use and Enforceability of

2000 US Electronic Signatures in Global and National Commerce Act (E-SIGN),[23] and in France, Loi 2000-230.[24]

Besides this important model law and its reflection in domestic legal systems, there are two paramount international sets of rules that promote uniform norms in the electronic commerce arena. They are the 2004 ICC eTerms,[25] and the 2005 UN Convention on the Use of Electronic Communications in International Contracts (e-CC),[26] which, due to their prominence, will be detailed below.

Three main common grounds can be derived from all of these international standards:

1. an electronic record is sufficient if it can be stored and retrieved;
2. there is no need for a formal 'digital signature' – clear assent as part of any e-mail suffices; and
3. rules are not conditional upon particular types of technology, but instead will be enforced in accordance with the notion of medium neutrality.

5.4.1 *ICC eTerms 2004*

Considering the rise of new technologies and their increasing use in international trade, in 2004 the ICC promulgated the ICC eTerms.[27] They are comprised of only two articles that aim to safeguard the validity of an electronically concluded contract, rather than regulation of the substantive issues of the contract. Although short, this set of rules is significant given the global importance of the ICC and its reach.

When parties incorporate the ICC eTerms, they agree on three main points found in Article 1:

1. an electronically concluded contract is valid and enforceable;
2. electronic messages can be used as evidence when correctly sent; and
3. parties will refrain from challenging the validity of electronic communications solely based on their electronic character.

The ICC eTerms in Article 2 state that they govern the use of electronic communication. Pursuant to Article 2(1) ICC eTerms, a message is considered to be dispatched when 'it

Electronic Contracting: The State of Uniform Legislation Attempting to Regulate E-Commerce transactions', *Michigan State Journal of International Law*, Vol. 16, No. 1, 2007, p. 158.

23 *Electronic Signatures in Global and National Commerce Act*, Pub.L. 106-229, 114 Stat. 464, enacted 30 June 2000, 15 U.S.C. ch. 96 (United States of America)(E-SIGN). *See id.*, p. 161.

24 Loi 2000-230, enacted 13 March 2000, JORF no 62, p. 3968 (France).

25 *International Chamber of Commerce eTerms*, 2004, available at <www.iccwbo.org/Data/Documents/Commercial-Law-and-Practice/ICC-eTerms-2004>(ICC eTerms).

26 *New York Convention on the Use of Electronic Communications in International Contracts*, adopted 23 November 2005, UN Doc. A/60/515 (entered into force 1 March 2013) (e-CC).

enters an information system outside the control of the sender' and received when 'it enters an information system designated by the addressee'.

Moreover, Article 2(2) ICC eTerms deals with the situation when the electronic message is sent to an information system that was not indicated by the addressee. In this case, the message is only received when the addressee in fact becomes aware of it.

Finally, Article 2(3) ICC eTerms mandates that the message is deemed to have been sent and received, respectively, at the sender's and at the addressee's place of business.

Part of these rules slightly differ from the interpretation given by the CISG Advisory Council Opinion. In light of Article 6 CISG, when the parties agree on the ICC eTerms 2004, they prevail over the general rules of the CISG.[28] Consequently, parties may contract around any possible inconsistencies by adopting the ICC eTerms as partial derogation from the CISG.

5.4.2 *e-CC (United Nations Convention on Use of Electronic Communications in International Contracts)*

The discussions that preceded the drafting of the e-CC reveal that the parties involved initially contemplated amending the international conventions affected by technological changes.[29] Nonetheless, UNCITRAL opted to promote the new convention, which entered into force at the beginning of 2013.[30]

In the words of the Preamble, the e-CC was designed *'[c]onsidering* that problems created by uncertainty as to the legal value of the use of electronic communications in international contracts constitute an obstacle to international trade'. In this sense, as often repeated, the e-CC aims to promote 'practical solutions for issues related to the use of electronic means of communication in connection with international contracts'.[31]

There are a number of reasons why discussion on interpretation of the CISG are related to the e-CC. One of them becomes clear in Article 20 e-CC. This provision includes the

28 This view is shared by Ihab Amro, dr. jur. and Assistant Professor of Private Law, in an unpublished article to which the authors have been given access. *See also* I. Amro, 'The Use of Online Arbitration in the Resolution of International Commercial Disputes', *Vindobona Journal of International Commercial Law and Arbitration*, Vol. 18, 2014.

29 J.A.E. Faria, 'Drafting and Negotiating History of the Electronic Communications Convention', *in* A.H. Boss & W. Kilian (Eds.), *The United Nations Convention on the Use of Electronic Communications in International Contracts*, Kluwer Law International, The Netherlands, 2008, p. 28.

30 e-CC, *supra* note 26.

31 UNCITRAL Secretariat, *Explanatory Note by the UNCITRAL Secretariat on the United Nations Convention on the Use of Electronic Communications in International Contracts*, 2007, para. 3, available at <www.uncitral.org/pdf/english/texts/electcom/06-57452_Ebook.pdf>; *see also* P.P. Polanski, 'International Electronic Contracting in the Newest UN Convention', *Journal of International Commercial Law and*

CISG in a list of international conventions whose interpretation must take into account the provisions of the e-CC.

It is important to outline three criteria for this parallel application:

1. the parties must have made 'use of electronic communications in connection with the formation or performance of a contract';[32]
2. the parties must have their places of business in Contracting States of both the CISG and the e-CC, or the applicable law must be that of a CISG and e-CC Contracting State;[33] and
3. the contract must be an international contract for the sale of goods governed by the CISG.[34]

5.4.2.1 Automated Transactions

A key provision in the context of electronic commerce relates to the matter of automated transactions. These are contracts that are concluded without any traditional human interaction.[35] In this matter, three important provisions ought to be underlined.

First of all, one should look to Article 4 e-CC, which, in Article 4(g), provides for the following definition of an 'automated message system':

> a computer program or an electronic or other automated means used to initiate an action or respond to data messages or performances in whole or in part, without review or intervention by a natural person each time an action is initiated or a response is generated by the system.

Bearing this concept in mind, Articles 12 and 13 e-CC specifically deal with automated transactions. The sole fact that a natural person did not review or intervene in the formation of the contract will not affect its validity or enforceability. As argued by Professor Eiselen, under a traditional view, it may seem strange to have a meeting of 'minds' without human interaction. Nevertheless, the e-CC rules propose to overcome this preconception and assure the validity of a contract concluded by means of the exchange of automated messages.[36]

32 Art. 1(1) e-CC.

33 Art. 1(1)(a) and (b) CISG; UNCITRAL Secretariat, *supra* note 31, para. 5.

34 Arts. 1-3 CISG. This chapter only intends to provide a framework rather than detailed scrutiny of the scope of application and applicability of either Convention, or the various (interesting) issues regarding this topic.

35 J.A. Zavaletta & E.B. Hymson, 'Widgets to Windows: The "Webolution" of Commercial Sales', *Computer Law Review and Technology Journal*, Vol. 6, 2002, pp. 249-250.

36 S. Eiselen, 'The UNECIC: The International Trade in the Digital Era', *Potchefstroom Electronic Law Journal*, Vol. 10, No. 2, 2007, pp. 14-16, available at <http://reference.sabinet.co.za/webx/access/electronic_jour-

Therefore, a contract concluded by the interaction of automated message systems (EDI) is *a priori* valid and enforceable.[37] Contrary to possible counter-arguments, the will of the relevant party is fully respected, since this intention is reflected in the deliberate programming of an automated message system.[38]

Such a message system generates in the offeree a legitimate expectation that the offeror indeed wishes to be bound by it. It also shows, quite reasonably, that the party who utilizes the opportunity to set up an automated message system bears the risk of their own message and of the objective intention transmitted by it.

5.4.2.2 Error in Communication

Article 14 e-CC concerns a related issue; error in communication.[39] Although it does not cover EDI transactions, since it provides for input errors by natural persons, it does provide an answer regarding responsibility for incorrect data entry.[40] This article allows the party who makes an input error to withdraw a message and resulting declaration of intention if the following criteria are met:

1. the automated system does not allow the natural person to review or correct its statement;
2. the natural person notifies the other party as soon as possible of its error; and
3. the natural person or the represented party has not attained a material benefit from the transaction.[41]

5.4.2.3 Place of Business

Another important topic in the e-CC relates to the concept of place of business. The first rule is that the place of business of a party is presumed to be the one indicated by it.[42] In the absence of such a declaration, which is not by any means a duty of the parties, default

37 E. Mik, 'Evaluating the Impact of the UN Convention on the Use of Electronic Communications in International Contracts on Domestic Contract Law: The Singapore Example', *Chinese (Taiwan) Yearbook of International Law and Affairs*, Vol. 28, 2010, available at <http://ink.library.smu.edu.sg/cgi/viewcontent.cgi?article=3050&context=sol_research> web version at pp. 8-9.

38 Eiselen, *supra* note 36, p. 16.

39 It is noteworthy that when it comes to validity issues, the CISG has a blurrier border of application, since, despite Art. 4(a) CISG, it is recognized that some validity issues are indeed dealt with by the CISG. Thus, here, the e-CC-CISG connection is more delicate. Regarding the validity exception under the CISG, *see* H.E. Hartnell, 'Rousing the Sleeping Dog: The Validity Exception to the Convention on Contracts for the International Sale of Goods', *Yale Journal of International Law*, Vol. 18, No. 1, 1993.

40 K.W. Chong & J.S. Chao, 'United Nations Convention on the Use of Electronic Communications in International Contracts – A New Global Standard', *Singapore Academy of Law Journal*, Vol. 18, 2006, pp. 127-128.

41 Polanski, *supra* note 31, p. 117.

42 As this is a presumption, the party may rebut the presumption by proof of what should be considered the

rules apply.[43] In this sense, Article 4(h) e-CC defines 'place of business' as 'any place where a party maintains a non-transitory establishment to pursue an economic activity other than the temporary provision of goods or services out of a specific location'.

In combination with Article 6 e-CC, this determines the location of the server and equipment used, since the domain name or e-mail address are not by themselves evidence of place of business for the purposes of the e-CC. Thus, the physical location prevails over any virtual ones.[44]

This understanding was designed to protect a party from the adoption of a fictional place of business by the other party. Nonetheless, the consequences of such possible deceitful conduct are to be resolved under domestic law.[45]

Furthermore, the place of business is relevant since, pursuant to Article 10(3) e-CC, an electronic communication is considered to have been sent from the place of business of the sender, and considered to have been received at the place of business of the recipient.

5.4.2.4 Form Requirements

Following on from the footsteps of Articles 6, 7 and 8 MLEC, Article 9 e-CC provides for form requirements. Like the CISG, it primarily promotes the general rule of freedom of form.[46] However, subsequent paragraphs provide default rules where the contract might be subject to three possible form requirements.

Under Article 9(2) e-CC, writing requirements will be fulfilled when the electronic communication fulfils the same purpose as a paper-based communication, in the sense that 'the information contained therein is accessible so as to be usable for subsequent reference'.

The second issue relates to the party's signature. Article 9(3) e-CC states that any signature requirement will be fulfilled when the method used to identify the declaring party or declare its intention regarding the content is 'as reliable as appropriate' under the circumstances, or identity and intention has in fact been proven.

Finally, the two last sections address requirements of integrity and reliability, such as those, for instance, which are generally imposed on arbitration agreements. In order to meet this requirement:[47]

43 S. Eiselen, 'The Interaction Between the Electronic Communications Convention and the United Nations Convention on the International Sale of Goods', *in* A.H. Boss & W. Kilian (Eds.), *The United Nations Convention on the Use of Electronic Communications in International Contracts*, Kluwer Law International, The Netherlands, 2008, p. 338.

44 Polanski, *supra* note 31, p. 114.

45 R.J. Malek, *Electronic Commerce in International Trade Law: Especially under the UN Convention on the Use of Electronic Communications in International Contracts 2005 and the CISG*, VDM Publishing, Saarbrücken, 2011, pp. 14-16.

46 Eiselen, *supra* note 36, pp. 32-33.

1. the communication's integrity must be reliably assured; and
2. the communication must be 'capable of being displayed to the person to whom it is to be made available'.[48]

5.4.2.5 Invitation to Make Offers

In the virtual commerce realm, 'one of the most controversial and unpredictable issues' relates to the binding effect of web advertisements.[49] Reflecting the rule already provided in the CISG, the e-CC in Article 11 provides that 'a proposal to conclude a contract made through one or more electronic communications which is not addressed to one or more specific parties' is generally to be considered as an invitation to make an offer, rather than a binding public offer awaiting acceptance.

It can be considered otherwise under two circumstances: (1) when the proposal is directed to one or more specific parties; or (2) where a web-based seller indicates its intention to be bound nevertheless. The second exception applies, for instance to internet auctions.[50]

5.4.2.6 Availability of Contract Terms

Some previous experiences in the international contract law field have anticipated the work of the UNICITRAL Working Group in regard to issues like the availability and incorporation of contractual terms, such as standard terms, and the battle of forms.

The e-CC decided not to specifically address this issue. Where a party is obliged to make certain contract terms available, Article 13 e-CC simply clarifies that the extent to which such a requirement is fulfilled is to be dealt with under the applicable law.[51] Frequently, the applicable law will be the CISG. In this case, although the CISG does not expressly deal with this particular issue, the rules of formation of the contract shall apply. Regarding the incorporation of standard terms, the CISG Advisory Council Opinion No. 13 provides interpretative guidance.[52]

5.5 SPECIFIC ISSUES

Against this background, it is interesting to analyze in more detail some specific situations that bring out the peculiarities of electronic communications in international sales. They

48 Art. 9(4)(b) e-CC.
49 Polanski, *supra* note 31, p. 116.
50 This particular issue is addressed again below.
51 Eiselen, *supra* note 36, p. 38.
52 CISG Advisory Council, 'Opinion No. 13 – Inclusion of Standard Terms under the CISG', 2013, Rapporteur:

shed light on the applicability of the CISG and Opinion No. 1, and their flexibility to deal with new problems in international transactions.

Article 11 CISG advances the principle of freedom of form. The CISG will apply to electronically concluded contracts that meet the requirements of applicability under Articles 1-3 CISG.[53]

Obviously, the CISG drafters could never have foreseen the new technologies and their impact on international commerce. However, given the its life expectancy, the CISG was designed to adapt to the development of usages and techniques, through its broad and flexible rules as well as the Article 7(2) mechanism.[54]

Regarding the aforementioned set of rules, such as the MLEC, the e-CC and the ICC eTerms, despite their uniform and international character, they are not to be used to interpret or complement the CISG without the parties' agreement. This would violate the autonomous interpretation mandated by Article 7(1) CISG.[55] However, if the conditions for application of both e-CC and the CISG are met, the conflicting e-CC provisions will prevail either as *lex specialis* for the subject matter they cover or as agreed-upon derogations under Article 6 CISG.

The analysis below will consider, in addition to the conclusions adopted by Opinion No. 1, the rules of formation of the contract and underlying principles of the CISG. This will assist in developing an understanding as to whether the CISG and Opinion No. 1 sufficiently provide for the adequate application of the Convention to electronic contracts.

5.5.1 *Withdrawal of an Offer or Acceptance*

According to Article 15 CISG, the offeror can withdraw an offer if the withdrawal reaches the recipient, at the latest, at the same time as the offer. One clear example of an effective withdrawal is when the offer is sent via 'snail mail' and the withdrawal via e-mail. In this case, given the faster speed of e-mail compared to 'snail mail', it is easy to understand that withdrawal is possible. This was, in fact, a situation analyzed by Opinion No. 1.[56]

A hard case that was not dealt with in detail by Opinion No. 1 is an offer sent by e-mail or by EDI communication. Considering that they are almost instantaneous means of

53 Landgericht [District Court] (LG) Freiburg, Germany, 22 August 2002, 8 O 75/02, available at <http://cisgw3.law.pace.edu/cases/020822g1.html>.
54 J.O. Honnold, *Uniform Law for International Sales under the 1980 United Nations Convention*, 3rd edition, Kluwer Law International, Netherlands, 1999, p. 16; O. Meyer, 'Constructive Interpretation – Applying the CISG in the 21st Century', *in* A. Janssen & O. Meyer (Eds.), *CISG Methodology*, Sellier, Munich, 2009, p. 342.
55 U. Schroeter, 'Introduction to Arts 14-24', *in* I. Schwenzer (Ed.), *Schlechtriem & Schwenzer: Commentary on the UN Convention on the International Sale of Goods (CISG)*, 4th edition, Oxford University Press, Oxford, 2016, para. 50.

ommunication, it may be virtually impossible for a withdrawal to bypass an offer so as o reach the offeree sooner. However, some recent technical developments claim to allow -mail sent in error to be 'un-sent' or 'recalled'.[57] This possible future situation may again hange general assumptions about technical tools available for e-communication. Notwithstanding, the general principle seems to remain applicable. These tools enhance he means to make the withdrawal reach the recipient before or at the same time as the ffer, but this basic criterion remains relevant and unchanged.

In a hypothetical, let us imagine that an e-mailed offer reaches the offeree during its on-business hours. A few minutes later – or even hours, but still within the offeree's non-usiness hours – the offeror sends a withdrawal, also by e-mail. The withdrawal has entered he offeree's server after the offer. Yet the offeree simultaneously becomes aware of both he offeror's intention to be bound and its intention to *not* be bound.

In this situation, under a strict interpretation of the CISG rule, the offer could not be awfully withdrawn. The withdrawal did not reach the addressee before the offer arrived, nd will thus have failed to comply with Article 15(2) CISG. Scholars have favoured this nterpretation.[58] Nothing in the definition of 'reaches' indicates that the addressee must ecome aware of the content. This can be evidenced through the drafting history of Article 4 CISG. It is also consistent with the needs of international trade, which require objective riteria that can be easily proven.

Despite these reasons, this position may be excessively strict. The reasoning underlying rticle 15(2) CISG is that if the addressee becomes aware of both the offer and its with-rawal at substantially the same time, the offer will have been effectively withdrawn.[59]

Especially regarding e-mails, the addressee's awareness of the communication can be easonably proved by a technical assessment of the moment the e-mail was read. This is ot essentially different from the evidentiary problem of determining the moment of eaching'. Therefore, this interpretation would not impose a standard of proof that would e impossible to meet.

This understanding regarding the possibility of withdrawal of offers made by e-mail an be fully extended to Article 22 CISG. This article concerns the withdrawal of an cceptance and, mirroring Article 15(2) CISG, provides that an acceptance can be with-rawn if the withdrawal reaches the offeror before the acceptance. Given the evident sim-arity of both rules, it is clear that, even when acceptance is sent via e-mail, if the offeror

7 F. Gallagher, 'UnSend.it Lets You Retrieve Accidentally Sent Emails', *Tech Times*, 8 April 2015, available at <www.techtimes.com/articles/44781/20150408/unsend-lets-retrieve-accidentally-sent-e-mails.htm>.

8 U. Schroeter, 'Article 15', *in* I. Schwenzer (Ed.), *Schlechtriem & Schwenzer: Commentary on the UN Convention on the International Sale of Goods (CISG)*, 4th edition, Oxford University Press, Oxford, 2016, para. 5.

9 I. Schwenzer & F. Mohs, 'Old Habits Die Hard: Traditional Contract Formation in a Modern World',

becomes aware of both the acceptance and its withdrawal at substantially the same time, the former will have been effectively withdrawn for all legal purposes.

5.5.2 *Definition of 'Writing' and Other Form Requirements*

As already mentioned, despite the CISG principle of freedom of form – which is also applicable to electronic contracts – the parties may be subject to writing requirements due to Article 96 reservations or specific contractual provisions.[60] In the electronic commerce arena, this definition is rather important.

Opinion No. 1 construes Article 13 CISG to include electronic communications, so far as they are functionally equivalent to paper-based communication.[61] It provides that for functional equivalence, the communication must be 'retrievable in perceivable form'.[62] This approach was also taken by other sets of rules, such as the aforementioned MLEC and E-SIGN.[63]

Whilst the e-CC also follows the philosophy of functional equivalence,[64] it provides a slightly different concept. Therein, it is expressly stated that the communication must be 'accessible so as to be usable for subsequent reference'.[65]

This chapter does not argue that the e-CC should ordinarily be used to complement the CISG. The concept of 'writing' under the CISG has been mostly built by scholarly writings. Nothing in the CISG text indicates that the e-CC definition should be rejected or is incompatible with the CISG. However, the CISG concept of writing is technologically outdated.[66] Therefore, within the limits of the CISG, a more modern approach such as the one provided for by the e-CC should be taken into consideration.

However, this more flexible interpretation of 'writing' should not be taken too far. It is possible to accept that the form requirement is met when the message can *only* be displayed on the recipient's computer screen,[67] as might be the case regarding SNS and mobile

60 Given the fact that form requirements following a declaration under Article 96 are reasonably more sensitive, the conclusions here are not to be unduly extended to these cases. In this matter, *see also* Amro, *supra* note 28. However, parties may have expressly inserted a clause forbidding oral modifications (NOM).

61 A.L. Charters, 'Growth of the CISG with Changing Contract Technology: "Writing" in Light of the UNIDROIT Principles and CISG-Advisory Council Opinion No. 1', *in* J. Felemegas (Ed.), *An International Approach to the Interpretation of the United Nations Convention on Contracts for the International Sale of Goods (1980) as Uniform Sales Law*, Cambridge University Press, New York, 2007.

62 CISG Advisory Council, *supra* note 9, *Rule*, on Art. 13 CISG.

63 E-SIGN s. 106, Definitions *(9) 'Record'*; MLEC Art. 6.

64 J.A.E. Faria, 'Drafting and Negotiating History of the Electronic Communications Convention', *in* A.H. Boss & W. Kilian (Eds.), *The United Nations Convention on the Use of Electronic Communications in International Contracts*, Kluwer Law International, The Netherlands, 2008, p. 22.

65 Art. 9(2) e-CC.

66 Malek, *supra* note 45, p. 71.

67 Some German courts have already advocated this view: Oberlandesgericht [Appellate Court](OLG) München,

application communications. This type of message may sometimes be difficult to retrieve, but whenever it is reasonably easy to retrieve it, a modern business person is expected to be able to do so.

Another issue regarding form requirements involves the need for a signature. Based on its freedom of form rule, the CISG does not impose in its text any signature requirement. Still, considering the parties' autonomy pursuant to Article 6 CISG, this element can be contractually required.

The e-CC explicitly deals with the signature requirement in Article 9(3) as previously described. The CISG does not expressly cover this issue. However, it provides sufficient grounds to regulate such a requirement. In light of Articles 8 and 9 CISG, it can be construed from the parties' intention whether this requirement has been met. Thus, it is not possible to give a universal solution,[68] but rather a case-by-case analysis should be conducted, for which CISG provisions already offer guidance.

5.5.3 *Dispatch, Receipt and Allocation of Risk for Failed or Unintelligible Communications*

Under the CISG, according to Opinion No. 1, dispatch occurs when the communication leaves the sender's *server*. Under the e-CC, it occurs when the communication leaves the sender's informational *system*. The more modern reference to *system* tends to encompass a broader range of situations. Technological developments may supersede the need for a server in the traditional sense. By making reference to a *system*, the e-CC avoids putting in jeopardy an adequate legal solution due to a specific technological choice unwittingly made by linguistic conventions.

In regard to the receipt of electronic communications, under the CISG the addressee receives the communication when it reaches them, *i.e.*, when it enters the addressee's *server*.[69] By contrast, the e-CC provides the communication is received when 'it becomes capable of being retrieved by the addressee'. This is deemed to have happened when the communication reaches the addressee's electronic address.[70] If one thinks about a cloud-based e-mail system, the message may be retrieved without ever entering 'the addressee's server' *per se*.

Although these concepts do not raise much concern by themselves, there are some situations that require a more careful look. One controversial situation is the addressee's failure to properly receive the message due to their overloaded mailbox. In this case,

html?id=295>; Landgericht [District Court](LG) Flensburg, Germany, 23 August 2006, AZ 6 O 107/06, available at <www.lawcommunity.de/volltext/189.html>.

68 Mulek, *supra* note 45, p. 74.

69 CISG Advisory Council, *supra* note 9, *Rule*, on Art. 15, para. 1.

although the e-mail will have been effectively dispatched, it will not have not been saved and stored in the addressee's e-mail inbox. Scholars have discussed whether such an e-mail, which passes the addressee's gateway but is not saved and stored by virtue of technical problems, has indeed reached the addressee for the purposes of the e-CC.[71] The key aspect is to determine whether technical difficulties in the reception, such as those indicated in this example, should be held against the addressee.

Regardless of the technical fact of whether or not the message has reached the addressee, it is important to protect the sender's legitimate expectations, given that all the legal consequences are triggered by the recognition that a communication has objectively 'reached' the addressee. The underlying reasoning behind the allocation of risks follows the guideline that a party must not bear risks that fall within the other's party's sphere of control and responsibility.[72] Bearing in mind this general premise, any problem in its own server or network that impeded the e-mail from being properly received is under the addressee's sphere of control. This rule applies for instance, when:

1. an e-mail is redirected to a spam box by the addressee's programmed filter;
2. the addressee cannot access their e-mail due to a protection mechanism;
3. the e-mail cannot be read as a result of a server crash.

All these situations represent difficulties that are under the addressee's sphere of control, and therefore the corresponding risks should not be borne by the sender, who has properly dispatched the communication.

However, if the sender has dispatched an e-mail to the wrong address or in the wrong format, then the sender is the one that should bear the corresponding risk. If the sender has attached unreadable annexes due to matters which fall within their own responsibility, then the sender also must be held liable for that risk.

A controversial situation arises when the sender addresses the e-mail to a general e-mail, but the responsible personnel to be reached have specific e-mails. This scenario should be interpreted in light of Article 8 CISG in order to determine whether the addressee has indeed consented to receiving e-mails at their general e-mail address. If not, the e-mail will only be deemed as received when the responsible staff member has become aware of its content.[73]

71 U. Schroeter, 'Article 24', *in* I. Schwenzer (Ed.), *Schlechtriem & Schwenzer: Commentary on the UN Convention on the International Sale of Goods (CISG)*, 4th edition, Oxford University Press, Oxford, 2016, para. 24.

72 Mulek, *supra* note 45, p. 80.

5.4 *Manipulation of Internet Protocol (IP) to Change the Perceivable Origin of a Communication*

he manipulation of IP might change the apparent origin of a communication and thus islead the addressee, giving for instance the impression that the sender's place of business in a certain country other than the actual one in which it is located.

This situation is particularly important regarding the applicability of the CISG, since ıe place of business is essential to determine the internationality.[74] The appearance of a arty's place of business in certain Contracting State, for example, may lead the other party ı count on the CISG's application. It may also interfere in what is foreseeable to a party the time of the conclusion of the contract, which may be relevant for the purposes of ındamental breach and calculation of damages under the CISG. Manipulation of IP may e used to circumvent legal, regulatory or contractual requirements and prohibitions, and may lead the other party to be unaware of such deviation. Even though the IP is not ecisive for determination of the place of business, it is one of many factors that will ıfluence a party's perception.

The concept of place of business is not explicitly provided under the CISG and should, ıen, be interpreted autunomously.[75] In this sense, the place of business is considered to e the place where the party openly participates in trade,[76] with a certain degree of inde-endence and stability.[77] The definition of the parties' place of business should take into ccount the interpretational rules provided in Article 8 CISG. Besides these rules, Article (2) CISG states that not only must the parties have their place of business in different tates, but that this internationality must also be apparent or known. This appearance can e inferred from the parties' dealings and information disclosed by them. These two pro-isions allow the conclusion that a party should be protected from an unforeseeable pplication of the CISG.

This is of a particular importance in electronic commerce. However, this reveals some lmost unsolvable problems. On the one hand, the apparent place of business is important ınder the CISG. On the other hand, the apparent place of business may be completely rtificial and unrelated to the physical one in electronic commerce.

It is therefore quite critical to impose some criteria in order to determine the place of ıusiness with a higher level of certainty when electronic contracts are involved. Although he CISG does not expressly provide for a modern concept of place of business, CISG loctrine and jurisprudence have developed important considerations that aim to encompass

4 Art. 1(2) CISG.

5 Art. 7 CISG.

6 Oberlandesgericht [Appellate Court](OLG) Stuttgart, Germany, 28 February 2000, available at <http://cisgw3.law.pace.edu/cases/000228g1.html>.

7 Oberster Gerichtshof [Supreme Court], Austria, 10 November 1994, 2 Ob 547/93, available at

the needs and challenges of electronic contracting, and, for instance, which might serve as guidance to enable the protection of parties from the manipulation of IP addresses.

Firstly, in light of the concept of place of business, the location of the server should not itself be considered the relevant place of business.[78] Further, although the parties' indications are regarded as important, a certain nationality indication in the domain name or the e-mail address is also not decisive,[79] given its unreliability. This reinforces the underlying principle that the definition of a party's place of business under the CISG is a matter of fact, and cannot be determined by presumptions alone.[80]

In this respect, the e-CC also strengthens the view that neither the location of the server, nor the domain name and e-mail address 'create a presumption that [the party's] place of business is located in that country'.[81] Notwithstanding, the e-CC provides a slightly different definition, at least in theory. As a general rule, it considers as the location of the parties to be that which is indicated by them.[82] This indication may nevertheless be superseded by contrary proof.

While these considerations do not answer all questions regarding the definition of the parties' place of business, they do provide sufficient guidance to deal with cases of IP manipulation.

5.5.5 *Website Offers: Invitations to Submit Offers or Offers to Unspecified Persons.*

As previously indicated, the matter of website offers and to what extent they are binding is a very sensitive issue in electronic commerce. This sensitivity can be illustrated by the well-known Eastman Kodak case, where at first sight, trivial data entry error cost the company US$2 million.[83] This is only one of a number of similar cases. In this regard, the

78 I. Schwenzer & P. Hachem, 'Article 1', *in* I. Schwenzer (Ed.), *Schlechtriem & Schwenzer: Commentary on the UN Convention on the International Sale of Goods (CISG)*, 4th edition, Oxford University Press, Oxford, 2016, para. 23.

79 J. Mowbray, 'The Application of the United Nations Convention on Contracts for the International Sale of Goods to E-Commerce Transactions: The Implications for Asia', *Vindobona Journal of International Commercial Law & Arbitration*, Vol. 7, 2003, p. 131, available at <www.cisg.law.pace.edu/cisg/biblio/mowbray.html>.

80 S. Eiselen, 'The Interaction between the Electronic Communications Convention and the United Nations Convention on the International Sale of Goods', *in* A.H. Boss & W. Kilian (Eds.), *The United Nations Convention on the Use of Electronic Communications in International Contracts*, Kluwer Law International, The Netherlands, 2008, p. 348.

81 Arts. 6(4) and (5) e-CC.

82 Art. 6 e-CC.

83 J.E. Hill, 'The Future of Electronic Contracts in International Sales: Gaps and Natural Remedies under the United Nations Convention on Contracts for the International Sale of Goods', *Northwestern Journal of*

speed and readiness of online transactions compel a definition as to whether website advertisements constitute binding offers, or merely *invitatio ad offerendum*.

> According to Article 14(2) CISG, [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.

Although website offers were not expressly considered, for obvious reasons, this article provides the general rule under which the problem should be examined. Even when a party is required to log in,[84] website advertisements are not addressed to one or more specific persons. Therefore, they should be generally considered as mere invitations to make an offer[85]. In this sense and in light of media neutrality, the same understanding already put forward regarding price lists and sales catalogues applies.

Having set the general rule, it is important to analyze the exception, *i.e.*, situations in which 'the contrary is clearly indicated'. In website offers informing readers of the remaining stock, in interactive applications, or in online auctions, there may be a reasonable suggestion that the offeror intends to be bound. Therefore, in these cases, the proposal may be considered a fully binding offer directed to unspecified persons. The other conditions of the offer are those expressed in the proposal.

In contrast to the CISG, the e-CC advances a more explicit provision in this regard, which in fact reflects the aforementioned scholars' opinions, rather than the CISG. Article 11 e-CC, besides the stating the identical general rule, expressly states that a 'proposal that makes use of interactive applications for the placement of orders through such information systems, is to be considered as an invitation to make offers'. However, it was not bold enough to explicitly ponder limited stock offers and assign to them a *prima facie* binding character.[86]

5.5.6 *Social Network Sites and Mobile Application Software Communications*

Another outstanding internet phenomenon concerns social network sites (SNSs), such as Facebook and LinkedIn, and mobile applications, such as WhatsApp, Wickr and Snapchat. These websites have already demonstrated their potential as a novel unconventional means

84 Malek, *supra* note 45, p. 29.

85 U. Schroeter, 'Article 14', *in* I. Schwenzer (Ed.), *Schlechtriem & Schwenzer: Commentary on the UN Convention on the International Sale of Goods (CISG)*, 4th edition, Oxford University Press, Oxford, 2016, para. 30.

of e-notification.[87] Courts in Australia,[88] Canada,[89] New Zealand,[90] United Kingdom[91] and the United States[92] have recognized the possibility of service and notification through SNS messages.

Certainly, these modern means of electronic communication cannot be neglected in a contemporary discussion of electronic commerce. In addition, similar applications come and go at extraordinary speed, and new tools are created to facilitate electronic interaction, payments and even product delivery (through software for 3D printers). One should look for general principles that will apply today and in the foreseeable future, regardless of the specific traits of a certain given form of communication. This discussion poses new challenges that test known and established categories. Since instantaneous communications trigger different legal effects when compared to non-instantaneous ones,[93] classifying such means of communication is of extreme importance. Consequently, it seems relevant to summarize some central features.

When interpreting the term 'oral', Opinion No. 1 equates real time communications such as telephone and telex to chat forum communications. Nonetheless, it considers e-mail equivalent to letter, even though the former is nearly instantaneous. Bearing this in mind, some distinctive characteristics can be isolated. Firstly, the speed with which a telephone call, telex message or e-mail reach the recipient is approximately the same. The main distinctions are rather the promptness with which the recipient becomes aware of the message, and their ability to immediately respond.

The crucial difference between instantaneous and non-instantaneous communications is the sender's awareness or legitimate expectation that at the same time that the message is sent, the recipient unequivocally – at least from an objective perspective – becomes aware of it and is able to respond. In the words of Opinion No. 1:

> The technique is such that if the sender writes an 'a' the letter 'a' immediately appears on the addressee's screen. The parties are both present at the same

87 M.S.A. Wahab, 'Online Arbitration: Tradition Conceptions and Innovative Trends', *in* A. Jan van den Berg (Ed.), *International Arbitration: The Coming of a New Age?*, Kluwer Law International, The Netherlands, 2013, p. 662.

88 *MKM Capital Property Limited v. Corbo and Poyser (a bankrupt)*, No. SC 608 of 2008, Australian Capital Territory Supreme Court, Australia, December 2008.

89 *Knott v. Sutherland*, AJ No. 1539, *Edmonton* 0803 02267, Alberta Court of Queen's Bench, Canada, 5 February 2009; *Boivin & Associates v. Scott* 10324, 201, Court of Quebec, Canada, 15 August 2011.

90 *Axe Market Gardens v. Craig Axe*, CIV 2008-485-2676, High Court, New Zealand, 16 March 2009.

91 *AKO Capital LLP v. TFS Derivatives*, Hastings County Court, United Kingdom, 17 February 2012.

92 *Mpafe v. Mpafe*, MN No. 27-FA-11-3453, Hennepin County Court, United States of America, 10 May 2011; *Rio Props. v. Rio Int'l Interlink*, 284 F.3d 1007, Court of Appeals for the Ninth Circuit, United States of America, 20 March 2002.

> time and they may talk orally or write to each other just as if they were present in the same room or were talking over the phone.

Thus an analogy is drawn to a face-to-face or telephone conversation, because the sender has, for instance, a legitimate expectation of an immediate acceptance, such as that provided in Article 18(2) CISG.

However, some of the mentioned means of communication, especially Facebook Messenger, WhatsApp and Wickr, have it both ways. For instance, if it is indicated that the recipient is online at the time when the sender dispatches the message, it virtually amounts to a real time communication. However, if the addressee is not, or does not seem to be simultaneously online, the communication is equivalent to an e-mail that has reached the recipient. Only when both parties are known to be simultaneously online and in immediate communication can such means be equated by analogy to real-time communication, such as a phone conversation. As logical and commonplace as this reasoning may be, it raises serious difficulties in international trade, given the need for certainty and objective criteria.

Another challenging characteristic of these means of communication is the fact that it is often obvious to the sender exactly when the recipient has both received and read the message. This is not normally possible in other means of communication, even electronic ones, except in the case of real time communication. Although it seems minor, this characteristic may have some effect on the notion of 'reaching' as developed under CISG doctrine – and in Opinion No. 1 – until now.

Moreover, a relevant feature concerning electronic communications is the possibility that the message might be retrievable. As proposed by Opinion No. 1, in order to fulfil the requirement of 'writing', the electronic communication must be functionally equivalent to a paper-based communication. In this sense, it must satisfy the requirement that it provide 'the possibility to save (retrieve) the message and to understand (perceive) it'. As already mentioned, an e-mail normally fulfils these functions. The challenging question is whether a communication by Facebook Messenger, WhatsApp message, or even a Snapchat can be retrievable and, thus, meet the writing requirement. The answer here is also blurred. However, it seems that it is factually possible to retrieve these type of communications, even if by print screening. This is especially true regarding SNS communications, which are fairly similar to e-mails in this regard.

Under the e-CC, as previously explained, there is a quite different requirement, namely the accessibility of the message so as to be usable for subsequent reference.[94] It appears that this requirement, by comparison with the requirement in Opinion No. 1, is more straightforwardly met by these modern means of communication.

5.5.7 *Incorporation of Standard Terms*

A different yet still internet related problem regards the incorporation of standard terms in dealings conducted on the internet. Two issues raise the greatest concerns. First, the compliance of the 'make available' criterion by mere reference to a website address. Secondly, the inclusion of standard terms via click-wrap ('agree') buttons.

Regarding the first issue, although not expressly addressed in its text, it is unanimously understood that the CISG provisions on interpretation and formation of contracts governs the inclusion of standard terms. In light of these provisions, it is concluded that, besides expressing an intention to be bound by the standard terms, the offeror must make the terms available to the offeree.[95] The prevailing view argues that sending the standard terms as an e-mail attachment or via a hyperlink is generally sufficient.[96]

It seems reasonable to go even further. Given the already emphasized presence of the internet in international commerce, 'the publication of standard terms on the Internet should be regarded as sufficient if there is a reference in the contract pointing to the availability of the standard terms on the Internet'.[97] As to the inclusion of standard terms via click-wrap buttons, in B2C contracts this problem is dealt by customer protection legislation. However, these protections are often not replicated for B2B contracts, nor should they be. If the offeree can reasonably become aware of the content of the standard terms, since they are understandable and in an appropriate language, the mere fact that their acceptance was thruugh use of a click-wrap button should not prevent their inclusion.

After all, it is not reasonable to expect that in a B2B scenario, a reasonable business person would not read available standard terms when concluding a contract. Further, if the offeree indeed does not read the terms, the offeror should not be made to bear the other party's lack of professionalism. It goes without saying that this stricter approach certainly should not be extended so far as to encourage deceitful behaviour.

5.5.8 *New Business Formats*

There has already been an interesting debate regarding application of the CISG to software. Given the lack of an express definition, scholars and courts have dedicated themselves to defining the concept of 'goods' under the CISG. It has been autonomously construed that

95 Bundesgerichtshof [Supreme Court](BGH), Germany, 31 October 2001, available at <http://cisgw3.law.pace.edu/cases/011031g1.html>; CISG Advisory Council, *supra* note 52, §3.

96 CISG Advisory Council, *supra* note 52, *Comments*, para. 3.4.

97 F. Lautenschlager, 'Current Problems Regarding the Interpretation of Statements and Party Conduct under the CISG – The Reasonable Third Person, Language Problems and Standard Terms and Condition', *Vin-*

'goods' under the CISG should be moveable,[98] and allow for the transfer of property at the time of the delivery.[99] Thus 'goods' could be 'any item that can be commercially sold and in which property can be passed on'.[100]

This chapter does not embrace the view that goods must be tangible.[101] It seems that that particular controversy has come to an end, since the vast majority of scholars,[102] in addition to jurisprudence,[103] affirms the general inclusion of software under the meaning of 'goods'.

These conclusions are helpful in determining whether the CISG applies to the sale of physical goods to be downloaded and 3D-printed, for instance. This type of transactions does not exist in the distant future, but is already part of everyday life. There are a variety of 3D-printed goods that are already being traded, such as glasses, racecars,[104] robotic prosthetics, toys, decoration items, clothes, shoes, and even weapons.

The extension of the reasoning applied to software to 3D-print sales is quite easy considering 'goods' under the CISG do not need to be tangible or corporeal. In these new type of contracts, there is no actual transport of the goods, nor transfer of property, which in light of Article 30 CISG are considered characteristics of a CISG contract; only the sale of a virtual design. As a matter of fact, the goods can be considered as non-existent beforehand.

It is defended that the fact that the goods (or corresponding software) are to be downloaded, or that there will not be an old-fashioned transfer of property, should not prevent the application of the CISG.[105] Therefore, the sale of goods to be 3D-printed after delivery should be encompassed by the CISG.

98 Schwenzer & Hachem, *supra* note 78, para. 16.

99 *Panda v. Shunde Westband Furniture*, Min Si Ti Zi Di No. 4 (2004), Supreme Court of the People's Republic of China, 21 September 2005.

100 F. Diedrich, 'The CISG and Computer Software Revisited', *Vindobona Journal of International Commercial Law and Arbitration, Supplement*, Vol. 6, 2002, p. 64, available at <www.cisg.law.pace.edu/cisg/biblio/diedrich1.html>.

101 *See* Oberlandesgericht [Appellate Court] (OLG) Koblenz, Germany, 17 September 1993, available at <http://cisgw3.law.pace.edu/cases/930917g1.html>; *contra* F. Ferrari, 'Brief Remarks on Electronic Contracting and the United Nations Convention on Contracts for the International Sale of Goods (CISG)', *Vindobona Journal of International Commercial Law & Arbitration*, Vol. 6, 2002, p. 294.

102 *See* Schwenzer & Hachem, *supra* note 78, para. 18; J. Lookofsky, 'In Dubio Pro Conventione? Some Thoughts about Opt-outs, Computer Programs and Prëemption under the 1980 Vienna Sales Convention (CISG)', *Duke Journal of Comparative & International Law*, Vol. 13, 2003, pp. 277-278.

103 *See* Commercial Court Zürich, Switzerland, 17 February 2000, available at <http://cisgw3.law.pace.edu/cases/000217s1.html>; *Silicon Biomedical Instruments. v. Erich Jaeger*, District Court Arnhem, The Netherlands, 28 June 2006, available at <http://cisgw3.law.pace.edu/cases/060628n1.html>; Landgericht [District Court](LG) München, Germany, 8 February 1995, 8 HKO 24667/93, available at <http://cisgw3.law.pace. edu/cases/950208g4.html>.

104 Author unknown, '40 Chinese students create a race car using 3D printed parts', *3D Printer and 3D Printing News*, available at: <www.3ders.org/articles/20130927-40-chinese-students-made-a-race-car-using-3d-printing.html>.

Nevertheless, this situation may give rise to a great number of new challenges regarding the conformity of such goods. Just to give one example, not all 3D-printers use the same technology. This could lead to incompatibilities between contractual expectations and the final product, and the CISG will need to resolve the issue in accordance with guidelines regarding conformity of goods.

5.6 Conclusion

When asked by Professor Honnold whether the CISG should be extended to new issues and areas through interpretation or by amendment, Professor Schlechtriem stated a preference for interpretation: '[w]e always have to be aware of the boundaries and limits of the Convention. Inside these boundaries and limits we can extend the Convention to cover issues not clearly provided for, not foreseen by the drafters'.[106]

This premise applies to the challenges of e-commerce. The CISG may not have foreseen all technological advances, but it was drafted in a flexible fashion so as to adjust to the changing times and conditions. This is reflected in CISG Advisory Council Opinion No. 1, which sets forth most of the fundamental criteria for application of the CISG to contracts made or performed by electronic means.

Analysis of electronic commerce shows the necessary solutions are there to be found and developed from the language and context of the CISG. After all, electronic contracting is simply a method of contracting, rather than something which alters the purpose of substantive rules. Thus, the solution is a matter of application and interpretation of the present rules.[107] In this sense, neither the CISG nor Opinion No. 1 requires any formal update. Their application has evolved in response to technological advances through scholarly writings and jurisprudence.

E-commerce is fast-changing by definition. The quest for novelty and constant replacement of technologies, products, methods and instruments are at its core. External efforts such as the Opinion No. 1 in particular restate underlying principles and provide an adequate framework for the gap-filling required by Article 7(2) CISG, and which is necessary to address the peculiarities of this field. They preserve the Convention's suitability to face changes in international commerce and to advance the CISG's mandate of uniform international application.

106 H. Fletchner (Ed.), 'Transcript of a Workshop on the Sales Convention: Leading CISG Scholars Discuss Contract Formation, Validity, Excuse for Hardship, Avoidance, *Nachfrist*, Contract Interpretation, Parol Evidence, Analogical, and Much More', *Journal of Law & Commerce*, Vol. 18, 1999, p. 220, available at <www.cisg.law.pace.edu/cisg/biblio/workshop.html>.

107 D.L. Kidd, Jr. & W.H. Daughtrey, Jr., 'Adapting Contract Law to Accommodate Electronic Contracts