MINOR DISSERTATION

‘ELECTRONIC COMMERCE IN INTERNATIONAL TRADE LAW – ESPECIALLY UNDER THE UN CONVENTION ON THE USE OF ELECTRONIC COMMUNICATIONS IN INTERNATIONAL CONTRACTS 2005 AND UNDER THE UN CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS 1980’

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Munich, 15 February 2007
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CHAPTER 1: GENERAL INTRODUCTION

With the increasing use and reliance on electronic means in international trade, the field of electronic commerce is getting increasingly important and nobody can deny that the use of electronic means is playing a key role in an efficient worldwide growing field of international commerce. According to a study of the Organisation for Economic Cooperation and Development\(^1\) approximately 7.5 per cent of all contracts will be concluded via the internet by the year 2007. The rapid development of new technologies, such as electronic mail, electronic data exchange and the internet makes it difficult to keep pace with. Through this progression the number of international contracts will also increase. This poses a challenge to lawyers as well as legislators around the world, as the field of electronic commerce in international trade law so far has not been in the focus of the general public.

For a long time, the UN Convention on Contracts for the International Sale of Goods 1980 (CISG)\(^2\) was the most important international legal instrument to deal with international sales of goods. In 1980, during the drafting of the CISG, electronic means of communication were in their infant stages and not yet highly developed, so

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\(^1\) See: www.oecd.org

\(^2\) The text of the CISG can be found on: http://www.uncitral.org/pdf/english/texts/sales/cisg/CISG.pdf
questions and problems concerning electronic commerce beyond telegram and telefax were not considered.3

In the late 1980s the global organisation, the United Nation Commission on International Trade Law (UNCITRAL) was chosen to develop uniform private law standards for electronic commerce. The work resulted in the UNCITRAL Model Law on Electronic Commerce 19964. Five years later in 2001 the UNCITRAL issued the UNCITRAL Model Law on Electronic Signatures.5

Both Model Laws were very successful and have been adopted all around the world.6 Despite the fact, that they both represent a widely accepted basis for international legal harmonisation in the field of electronic commerce, calls for a binding Convention began even before UNCITRAL issued the UNCITRAL Model Law on Electronic Signatures 2001, as it was argued, that only a binding instrument could effectively remove obstacles to electronic commerce that might derive, for example, from form requirements contained in other international Conventions.7


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4 The final text and a guide to enactment of the Model Law on Electronic Commerce can be found on: http://www.uncitral.org/pdf/english/texts/electcom/05-89450_Ebook.pdf
5 The final text and a guide to enactment of the Model Law on Electronic Signatures can be found on: http://www.uncitral.org/pdf/english/texts/electcom/ml-elecsig-e.pdf
8 The final text can be found on: http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/2005Convention.html
In this dissertation I will deal with electronic commerce in international law. Therefore I will present the Electronic Contracting Convention and analyze its scope of application, its key provisions as well as its importance to international trade.

In the second part I will analyze all relevant questions of electronic commerce under the CISG, as it is, despite the new UN Electronic Contracting Convention, the best known and most adopted Convention when it comes to international trade.\(^9\) Furthermore I will compare the problematic issues of electronic commerce under both Conventions and present their advantages and disadvantages in the sector of electronic commerce. Additionally I will show the importance and impact of both legal instruments on electronic commerce in international trade.

**CHAPTER 2: THE UN CONVENTION ON THE USE OF ELECTRONIC COMMUNICATIONS IN INTERNATIONAL CONTRACTS 2005**

1. **Introduction**

1.) **Historical development of the Electronic Contracting Convention**

Until 1996 the most important legal instrument for any international sales of goods was the CISG. Although it was and still is a great success, it was drafted before electronic communication was developed and neither its language nor its concept seems to fit for the new achievements in digital communication. It was obvious that, despite interpretation and development of the CISG by jurisprudence, it would not apply to all aspects of electronic contracting. Furthermore by developing different interpretations of the provisions in different countries around the world, the lack of legal certainty and predictability in electronic commerce would grow and cause even more confusion.

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\(^9\) To see the present status of ratification of the CISG and a list of all states that have adopted the CISG see: [http://www.uncitral.org/uncitral/en/uncitral_texts/sale_goods/1980CISG_status.html](http://www.uncitral.org/uncitral/en/uncitral_texts/sale_goods/1980CISG_status.html)
The only solution was to create a legal instrument dealing exclusively with electronic commerce.

The first step was the elaboration of the UNCITRAL Model Law of Electronic Commerce\textsuperscript{10} which started in the early 1990s and was completed in 1996. The Model Law on Electronic Commerce developed a coherent set of legal responses to the principal questions posed by electronic commerce, with the goal to remove barriers that traditional legal rules tended to pose to the new practices.\textsuperscript{11} Its prime principle was the non-discrimination of electronic communication. Article 5 of the Model Law for example stated that electronic communication may not be denied legal effect solely because it is done by an electronic medium and article 6 set out that the legal requirement of writing may be satisfied if the electronic record is accessible to be used for subsequent reference.

Following the Model Law on Electronic Commerce, the Working Group started generating a Model Law on Electronic Signatures.\textsuperscript{12} This Model Law dealt mainly with the question of reliability of electronic signatures. This issue had not yet been discussed in the Model Law on Electronic Commerce, so it was necessary to pursue the question of electronic signatures. The work was finalized in 2001 and the Model Law on Electronic Signatures was ready to be adopted.

As mentioned above, both Model Laws were widely adopted and were a great success in the field of electronic commerce. Nevertheless it was said, that the problem of legal uncertainty and non-harmonisation had not yet been solved. The problem was that the Model Laws were not binding and the states had flexibility in choosing provisions to implement them in their domestic laws. So countries which have adopted the Model Laws have done so inconsistently and each country has implemented the Model Law differently. This resulted in a significant variation of electronic commerce legislation.

\textsuperscript{10} The text can be found on: http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/1996Model.html
\textsuperscript{11} Gregory, ‘The proposed Convention’, p. 313.
\textsuperscript{12} The final text can be found on: http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/2001Model_signatures.html
The EU, for example, promulgated the Directive 2000/31/EC on Certain Legal Aspects of Information Society Services, in Particular Electronic Commerce, in the Internal Market\textsuperscript{13} (‘EU Directive on Electronic Commerce’), which differed significantly in scope and content from the Model Law on Electronic Commerce.\textsuperscript{14}

Another problem was that several states had already adopted their own national laws on electronic commerce when the Model Laws were elaborated.\textsuperscript{15}

It was said, that only the elaboration of a binding Convention on electronic commerce could overcome the lack of uniformity and harmonisation as well as fill the gaps in the present legislation. Only a binding Convention would be adopted without alterations and changes (except for changes which are expressly allowed under the Convention) and would be binding law for signatory states (see: article 26 of the Vienna Convention on the Law of Treaties 1969).\textsuperscript{16}

Nevertheless there were also arguments voiced against a new Convention. One of them was that if countries want to promote or just remove legal barriers in electronic commerce they could do so by adopting the Model Laws. If the Convention says the same thing, it would be superfluous, but if it says something different than the Model Laws it would be confusing.\textsuperscript{17} It was also argued that there is a sufficient number of legal instruments on electronic commerce and a new one would not harmonise the legal system, but cause even more confusion.

Different approaches were discussed how to solve the existing problem of legal uncertainty and diversity.

\textsuperscript{13} The text (German language) can be found on: http://europa.eu.int/eur-lex/pri/de/oj/dat/2000/l_178/l_178200000717de00010016.pdf
(English language): http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32000L0031:EN:HTML

\textsuperscript{14} Chong/Chao, ‘UN Convention’, p. 117.

\textsuperscript{15} At the time the UNCITRAL Model Law on Electronic Signatures ratified by the UN in July 2001 the US State Utah (1995), Russia (1995), Germany (1997), Italy (1997), Malaysia (1997), Australia (1999), UK (2000) and New Zealand (2000) have already elaborated their own national law on electronic signatures.

\textsuperscript{16} Article 26 of the Vienna Convention on the Law of Treaties 1969 embodies the principle of ‘pacta sunt servanda’ by saying that every treaty in force is binding upon the parties and must be performed by them in good faith.

\textsuperscript{17} Gregory, ‘The proposed Convention’, p. 317.
Some have proposed a modification of the CISG and its adjustment to electronic commerce as a solution, but soon this option was rejected, as more confusion would be caused, in case some countries would adopt the modernised CISG while other countries would still have the ‘old’ CISG. Furthermore there was the risk, that an extensive modification would be required, which would produce more costs and delays than the creation of a new legal instrument.18

The International Chamber of Commerce (ICC) proposed the development of a new Model Law19, where new topics could be subject of opt-in private systems of rules, comparable to the various existing ICC rules. Although the system of ICC rules is widely recognized, it was argued, that a new Model Law as proposed by the ICC was not the appropriate legal instrument, since it would not remove the lack of non-conformity, as once again there would be a variety of different legal standards. Additionally it was unclear, if the adoption of the new rules would require a prior contract between the parties or even a statutory base.20

Despite these various opposing arguments and different proposals for an approach, a new Convention was still seen as the best solution.

In 2001 the Working Group was tasked with the elaboration of a new Convention on Electronic Contracting in International Trade. The work started in March at the 39th Session of the Working Group21 and was finalized at the 44th session in October 2004.22 It is quite clear, that the drafters were heavily influenced by the CISG (especially in the first chapter of the Electronic Contracting Convention) and by the Model Laws (which can be seen especially in the third chapter of the Convention).23 After the Convention was adopted by the UN General assembly on the 23 November 2005, it is open for signature at the UN Headquarters in New York

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19 Legal Aspects, A/CN.9/WG.IV/WP.101. See also Legal Aspects, A/CN 9/WG.IV/WP.105.
21 Report, A/CN. 9/509
22 Report, A/CN. 9/571
23 All similarities and differences of the Convention and the CISG as well as of the both Model Laws will be discussed in detail in the relevant articles.
from the 16 January 2006 to the 16 January 2008. It is subject to ratification, acceptance or approval by the signatory states and is open for accession by non-signatory states.

2.) The goal of the Convention

The Electronic Contracting Convention can be adopted by all states - contrary to the flexible approach used in the Model Laws- as a uniform and binding set of rules. Even if a state does not ratify the Convention, it will still influence the terms of the transaction, particularly where the other contracting party is from a state that is a signatory to the Convention. The goal of the Convention is stated clearly in the preamble. The problems created by uncertainties as to the legal value of electronic communication exchanged in the context of international contracts constitute an obstacle to international trade. Considering this, the Convention seeks to remove obstacles to the use of electronic communication in international contracts, including obstacles that might result from the operation of existing international trade law instruments. The Convention shall also enhance legal certainty and make international contracts commercially and legally more predictable. Additionally it seeks to promote the development of trade and to improve the efficiency of commercial activities and to help states gain access to modern trade routes and previously remote parties and markets. It also offers practical solutions for issues related to the use of electronic means of communication in connection with international contracts. Furthermore the Convention may be used as an interpretation guideline for other legal instruments in international trade and electronic commerce.

However, he Convention is not intended to establish uniform rules for substantive contractual issues that are not specifically related to the use of electronic communications.

24 There are a few possibilities for the states to modify the Convention when they adopt it. I will discuss this issue later. Nevertheless the uniformity is not destroyed by the modification. See: Chapter 2, II, 2.) 3.)
26 Explanatory note, para. 4.
3.) Core principles

The Convention contains provisions embodying two principles at the core of any electronic communication law: It provides functional equivalence of electronic communications, while preserving the principle of technological neutrality.

Functional equivalence means that the law treats paper documents and electronic transactions equally. This is especially important, as this principle can have impact on the interpretation of other legal instruments which contain provisions on form, writing or signature requirements. Technological neutrality means that the law does not discriminate between different forms of technology.27

As a further principle the party autonomy is embodied in the Electronic Contracting Convention. This principle is a core issue in international trade, since it has been already established in the CISG, especially in article 6 CISG and, to a lesser extent, in both Model Laws.

4.) Status of ratification

The Electronic Contracting Convention has been opened for signature on the 16 January 2006. Pursuant to article 23, ‘the Convention enters into force on the first day of the month following the expiration of six months after the date of deposit of the third instrument of ratification, acceptance, approval or accession’. The first states to sign the Convention were the Central African Republic and Senegal, Lebanon, China, Singapore, Madagascar, Sri Lanka and Sierra Leone followed. By now seven states have signed the Convention.28

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28 The present status of ratification can be found on:
Last access to the website, 01.02.2007
II. Scope of application of the Electronic Contracting Convention

1.) Positive determination of the scope of application

The scope of application is positively determined in article 1 of the Convention. Article 1(1) regulates that the Convention applies to the use of electronic communications in connection with the formation or performance of a contract between parties whose places of business are in different states.

a.) Electronic communication in connection with formation and performance of a contract

The term of ‘electronic communication’ is defined in article 4 (b) and (c) as ‘any communication whereby the parties generate, send, receive or store information by electronic, magnetic optical or similar means’. This definition is very broad and leaves space for new technological developments. Beyond that, contracts that are partially made by electronic communications and partially by traditional means such as oral or written communication are also covered. Furthermore the definition also includes arbitration agreements and other legally binding agreements whether or not they are usually called ‘contracts’. The definition of ‘in connection with formation and performance’ in terms of article 1 (1) is not only limited to the conclusion of a contract but also covers any contract negotiation and is applied even to communications that are done at a time when no contract - and possibly not even negotiation of a contract - has yet come into being.

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29 The notion ‘parties’ includes both natural persons and legal entities. Moreover the application of the Electronic Communications Convention does not depend on whether the parties are considered ‘civil’ or ‘commercial’. Therefore, for the purpose of determining the scope of the Electronic Contracting Convention, it does not matter whether a party is a merchant or not in a particular legal system that applies special rules to commercial contracts different from the general rules of contract law. Also the parties’ nationality is irrelevant. ‘Explanatory note’, para. 68, 69.


It is clearly visible from the working papers\textsuperscript{33} that the drafters intended such a broad interpretation, as they considered to include the word ‘negotiations’ in the text, but finally felt, that the word ‘formation’ is broad enough to cover all stages of contracting. Consequently the Convention applies also to communications that do not result in a conclusion of a contract.

Although the provision is based on the Model Law on Electronic Commerce\textsuperscript{34}, the wording differs, since the Model Law refers to ‘data messages’ only. The new term ‘electronic communication’ establishes a link between the purposes for which electronic communication might be used and the notion of ‘data messages’ which was important to retain, since it encompassed a wide range of techniques beyond purely ‘electronic’ techniques.\textsuperscript{35}

\textbf{b.) International contracts}

Another condition of applicability is the ‘internationality’ of the communication. For the purposes of the Convention, a communication is international, if the parties have their places of business in different States. However, the Convention does not require both States to be contracting States of the Convention, as long as the law of a contracting State applies to the dealings of the parties.\textsuperscript{36}

It was not clear from the beginning on, whether the Convention shall apply to all or to international contracts only. The drafters discussed the possibility of the applicability to all electronic contracts, both international and domestic,\textsuperscript{37} but rejected it in favour of restricting the text to international transactions, with the argument that the goal was the development of an electronic parallel to the

\textsuperscript{33} Report, A/CN.9/571, para. 15.
\textsuperscript{34} The text of article 1 of the Model Law on Electronic Commerce: Sphere of application. This Law applies to any kind of information in the form of a data message used in the context of commercial activities.
\textsuperscript{35} Chong/Chao, ‘UN Convention’, p. 136.
\textsuperscript{36} Report, A/CN.9/571, para. 19.
\textsuperscript{37} Report, A/CN.9/528, paras. 29-31.
CISG. Pursuant to its article 1 (1), the CISG also applies to international contracts only.

c.) **Place of business**

aa.) **Determination of the place of business**

The definition of the place of business can be found in article 4 (h) of the Convention. Furthermore article 6 sets out a number of rebuttable presumptions and default rules to determine the parties’ location or the place of business. This is new, as there was no adequate definition in the Model Law on Electronic Commerce.

The determination of the place of business or the location of the parties is crucial and plays an important role, as it not only decides whether the Convention is applicable, but is also important to determine the place of where electronic communication is dispatched, the place of contract formation as well as for issues such as jurisdiction, applicable law and enforcement.

The determination of a location in electronic commerce can be very difficult and challenging, as the internet is supranational and ignores political and legal borders.

Article 4 (h) of the Convention defines the place of business as ‘any place where a party maintains a non-transitory establishment to pursue an electronic activity other than the temporary provisions of goods or services out of specific location’. It applies, when the party has only one place of business and has not indicated any place. Otherwise, article 6 of the Convention is applicable.

Article 6 (1) regulates that the place of business is presumed to be the location indicated by the party. This presumption can be rebutted by the other party by demonstrating that the indication was incorrect.

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Neither the CISG nor the Model Law on Electronic Commerce contains such a rule. The rule reaffirms the autonomy of the parties to determine their location where they have multiple places of business.41

Indeed, the Working Group noticed that the article is not intended to allow parties to invent fictional places of business that do not meet the requirements of article 4, and that its presumption is not absolute, and that the Convention does not uphold an indication of a place of business by a party where such an indication is inaccurate or intentionally false.42 However, the Convention itself is silent on how to deal with the question of an incorrect indication, whether it is intentional, negligent or without any fault and about the legal consequences thereof. These issues are hence governed by the applicable law.

Where no indication has been made by a party and the party has more than one place of business, the place with the closest relationship to the relevant contract is the place of business, with regard to the circumstances known to or contemplated by the parties at or before the conclusion of the contract (article 6 (2)). The rule is based on article 10 (a) CISG.

The circumstances taken into account could be for example the record communications or the location from where one party has been consistently negotiating with the other party, as then the expectation would be that this is where its place of business is.43

Nevertheless the determination of the ‘closest relationship’ can be difficult, as the Convention is silent about the question, which standards and criteria should be used.44

Article 6 (3) establishes, that if a natural person does not have a place of business, reference is to be made to the habitual residence. This rule has the same wording as its predecessor article 10 (b) CISG.

44 For a review of the term ‘closest relationship’ see e.g: v. Hoffmann/ Thorn, IPR, § 1, para. 12.
45 Mueglich, ‘UNCITRAL-Uebereinkommen’, p. 4.
bb.) No indication by virtual location.

The Working Group\textsuperscript{46} has considered whether circumstances exist from which the location of the relevant place of business can be inferred and which might be used to establish a legal presumption of a party’s location. The first issue dealt with, was the location of the technology and the information systems which have been used. The drafters argued that the location of the equipment and of its supporting technology is not an adequate factor for determining the location of the parties, since it does not provide sufficient indication about the parties of the contract, because the location of the system can change without being apparent to the parties during their communications. It was also pointed out, that the management and operation of an information system can be entirely outsourced or run by a third party.\textsuperscript{47} In consequence article 6 (4) regulates that the location of the equipment and technology, for example the location of the server, or of the system accessed does not define the place of business.

The same applies to domain names/internet names and electronic mail addresses connected to a particular country.\textsuperscript{48} According to article 6 (5) of the Convention they do not specify the place of business. In some countries, the assignment of domain names can be made only after verification of the accuracy of the information provided by the applicant, including its location in the country to which the relevant domain name relates\textsuperscript{49}, so it might be appropriate to rely, at least in part, on domain names for ascertaining a party’s location. However in general it was felt that an electronic mail address or a domain name could not automatically be regarded as the functional equivalent of the physical location of a party’s place of business.\textsuperscript{50} Additionally it would have been difficult and unreasonable for the contract parties to find out in which countries verification takes place.

\textsuperscript{46} Legal aspects, A/CN.9/WG.IV/WP.104.
\textsuperscript{47} Legal aspects, A/CN.9/WG.IV/WP.104, para. 9.
\textsuperscript{48} Domain names identify one or more IP addresses, e.g. Microsoft.com. Electronic mail addresses also contain a domain name, e.g. abc@gmx.com
\textsuperscript{49} The Swedish domain name registration system, for instance, seems to require proof of a company’s claim to the domain name and its link to the country. See: Roos, ‘Domain names in Sweden’, p. 70.
\textsuperscript{50} Legal aspects, A/CN.9/WG.IV/WP.104, para. 19.
Hence, top level domains like ‘.tv’, which are often used to indicate the term ‘television’, have no indication or connection with the island state of Tuvalu, which has ‘.tv’ as a country code top level domain. Nevertheless these provisions do not preclude a court or an arbitrator from taking these matters into consideration in determining the location of the parties, where it is appropriate.

Consequently the Convention relies on physical rather than on virtual location and is primarily concerned with click-and-mortar companies that pursue both traditional and online outlets. However the provisions of the Convention do not apply to purely virtual companies that do not have any physical establishment and exist only on the internet.

cc.) No obligation to disclosure of location

The Convention does not impose an obligation on the parties to disclose their location to the other party. The Working Group discussed the legal consequences of such a duty in detail. With respect to electronic commerce, it might lead to a duality of systems, since no such obligation exists for paper-based transactions. The inclusion of disclosure requirements was regarded moreover as particularly problematic since the Convention could not provide for the consequences that might arise from failure by a party to comply with them. Furthermore disclosure might be harmful to some business practices and does not fit to a Convention, which applies only to business transactions, since the disclosure is thought to protect consumers. Moreover the possible consequences of failure to comply with the duty would have led to nullity or non-enforceability of the transaction, which was said by the drafters to be ‘undesirable and unreasonably intrusive’.

51 See for example www.mtv.tv or www.fcb.tv.
52 Report, A/CN.9/571, para. 98. Explanatory note, para. 120.
54 Legal aspects, A/CN.9/WG.1V/WP.104, para. 22.
56 For example, where agents transact for an undisclosed principal, see: Chong/Chao, ‘UN Convention’, p. 124.
Nevertheless, under article 7, the applicability of domestic law that may establish a duty to disclose the location, the identity or other information is not affected.57

d.) Question of autonomous applicability

As discussed above, the parties’ places of business have to be in different states (article 1 (1)), whereby according to article 1 (2), the mere fact of ‘internationality’ is to be disregarded, when it is not apparent to the other party or has not been disclosed. Also neither the parties’ nationality nor the contract’s character is to be taken into consideration in determining the applicability of the Convention (article 1 (3)).

Despite the regulation mentioned above the Convention on Electronic Contracting does not contain a provision comparable to article 1 (1) CISG58, which limits the applicability to the situation only, where the states are contracting states or the rules of private international law lead to the application of the CISG.

So, the question is if the Electronic Contracting Convention applies either autonomously59, or where both or only one party is from contracting states, or where merely the law of a contracting state governs the transaction between parties.

The Working Group60 discussed this problem in detail, as the wording of article 1 allows all interpretations. Although several arguments were made in favour of an autonomous application (such as legal certainty; broad scope of the Convention; pure private character of transaction, as to there being no infringement of state sovereignty) the prevailing view was that the Convention should only apply when

57 Such duties are for example regulated in the EU directive on Electronic Commerce. The duty results form the different scope of application. The EU Directive applies to consumer contracts also.
58 The problem is only addressed in an explanatory note in Report, A/60/17. Although the Working Group considered inserting a rule similar to article 1 (a) CISG, they finally felt that there was no need for such a parallelism, see: Explanatory note, para. 62. Report, A/CN.9/548., para. 89.
60 Report, A/60/17.
the law of a contracting state applied to the underlying transaction\textsuperscript{61}, since another approach would infringe state sovereignty.

On the other side, the cumulative requirement that both those states should be contracting states of the Convention was rejected because it was felt that the cumulative requirement would aggravate the application and lead to the undesirable result that a court in a contracting state might be mandated to interpret the provisions of its own laws (for instance, regarding form requirements) in different ways, depending on whether or not both parties to an international contract were located in contracting States of the Convention\textsuperscript{62}.

Consequently the Convention applies, if the private international law leads to the application of the domestic law of a contracting state. Hence it is neither necessary for both nor for one of the parties to be from contracting states of the Convention as long as the law of a contracting state is the applicable law. The applicable law is thereby to be determined by the rules on private international law of the forum state, if the parties have not validly chosen the applicable law\textsuperscript{63}.

Although the drafters have expressed their point of view in the working papers and in the explanatory note, there are still opponents that represent the opposite view and favour an autonomous application\textsuperscript{64}. Nevertheless the prevailing view\textsuperscript{65} amongst the legal scholars agrees with the drafters’ opinion and rejects an autonomous application as well as the requirement of double participation. Since the Electronic Contracting Convention was intended to be an electronic parallel to the CISG and was based on it, this is the logical point of view.

\textsuperscript{61} Report, A/60/17, para 22. Explanatory note, para. 278.
\textsuperscript{62} Report, A/CN.9/571, para. 17.
\textsuperscript{63} ‘Explanatory note’, para. 6, 63.
\textsuperscript{65} See for example: Chong/Chao, ‘UN Convention’, p. 120.
2. Exclusions of scope of application

a.) Consumer contracts

Article 2(1) (a) expressly excludes contracts concluded for personal, family or household purposes only. Consequently the provisions of the Convention do not create any rights or obligations to consumer contracts. This exclusion corresponds with article 2 (a) CISG, which also excludes consumer contracts from the scope of application, however unlike the corresponding exclusion in the CISG, the exclusion in the Electronic Contracting Convention is an absolute one, meaning that the Convention does not apply to contracts entered into for personal, family or household purposes, even if the purpose of the contract is not apparent to the other party.66

b.) Transactions in certain financial markets

Moreover, article 2 (1) (b) excludes transactions in certain financial markets67, as it was felt that the financial services sector is already subject to well-defined regulatory controls and industry standards and no benefit would be derived from their inclusion in the Convention.68

c.) Bill of Exchange, promissory and consignment notes, bill of lading, warehouse receipts or any transferable documents or instruments that entitle the bearer or beneficiary to claim delivery of goods or payment of money

Article 2 (2) excludes the application of the Convention for the abovementioned matters. It was argued that creating an electronic equivalent to the paper-based negotiability was very difficult, since for example, transferable instruments made it necessary to develop legal, technological and business solutions to ensure the presentation of a single original, which had not been yet fully developed.69

66 ‘Explanatory note’, para. 75.
67 Article 2 (1) (b) refers to exchange, foreign exchange, inter-bank transactions and transfer of security rights.
Despite this exclusion, the Convention applies to letters of credit and bank guarantees.\textsuperscript{70}

It is worth mentioning that the list of exclusions is short, since the goal was a broad field of application. Although the Working Group discussed other matters to be excluded\textsuperscript{71}, it favoured a short list of global exclusion with the possibility of exclusions made individually by the contracting state party.

3.) Declaration limiting the scope of application by Contracting States

As described above, article 19\textsuperscript{72} of the Convention gives the state parties the possibility to limit the scope of application.

Pursuant to article 19 (1), the contracting state can limit the scope of application by declaring that it will apply the Convention only, when the states referred to in article 1 (1) are contracting states (article 19 (1) (a))\textsuperscript{73} or when the parties to the transaction agreed that the Convention applies (article 19 (1) (b)). Consequently, where a state has made a declaration under article 19 (1), the Convention applies according to the requirements of article 19 (1) regardless of whether the rules of private international law of the ‘forum’ state lead to the application of the laws of that state or of another state.\textsuperscript{74}

Under article 19 (2), the contracting state can exclude specified matters from the scope of application. These can be for example transactions dealing with immovable property or similar matters as excluded under the CISG.\textsuperscript{75}

The declaration on limiting the application can be made by signing the Convention.

\textsuperscript{70} Report, A/60/17, para 75.
\textsuperscript{71} Such as family law or immovable property law, see: Report, A/CN.9/571, paras. 59-66.
\textsuperscript{72} Article 19 as well as article 20, which will be discussed later, are to read with article 1 that sets out the scope of application.
\textsuperscript{73} As discussed above, the Convention can also apply, when one or even no contract party is from a contracting state to the Convention. With the limitation of the scope under article 19 (1) (a), both parties of the transaction must be from a member state to the Convention.
\textsuperscript{74} Explanatory note, para. 278.
\textsuperscript{75} All exclusions of the CISG, see article 2 CISG.
Although it seems positive to keep the list of global exclusions in article 2 short and grant the contracting parties the power of individual restriction of the scope of application, this approach bears several problems.

Primarily, the approach contravenes the goal of harmonisation, unification and certainty of legal rules on electronic commerce, since these goals can be stripped if different states make different declarations of excluding different matters.76

In addition, it can be very difficult for private parties, for whom the Convention has been created, to discover, which states have declared which restrictions. Although this problem could be solved by providing a list of states and their limitations by the UNCITRAL, this would complicate its use extremely.

Furthermore it appears to be an undue obstacle to international electronic commerce, if a private party could not benefit from the provisions of the Convention only because the state where the other contract party had its place of business had excluded the matter covered by the particular contract.77 On the other hand, it seems to be superfluous to grant the power of limitation to the state parties, since it is at the discretion of the contract parties to vary and derogate from the original text of the Convention.

4.) Extension of the scope of application

As counterpart to article 19, article 20 grants the possibility to extend the scope of application by making the Convention applicable to electronic communications used in connection with the formation or performance of a contract to which other international instruments apply.

Article 20 (1) contains the regulation that the application of the Convention is extended to contracts which fall within the scope of the listed Conventions, which the contracting state is or may become party to.

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76 For more details concerning the disadvantages of article 19 see: ‘Explanatory note’, paras. 278, 279.
77 Connolly/Ravindra, ‘UN Convention on E-Commerce’, p. 34.
The Conventions listed in article 20 (1) include the Convention on the Recognition and Enforcement of Foreign Arbitral Awards 1958 (New York Convention) and the CISG.\(^78\) In practice this means that if the state party (to the Convention on Electronic Contracting) is or may become state party to the CISG the form requirement of ‘writing’ in a contract as used in the CISG would be extended to also cover electronic writing.

This is a wise strategy, as it is much easier to give new meaning to older Conventions than to renegotiate all of them.\(^79\)

The approach described in article 20 (1) also fulfils the Convention’s goal of removing legal obstacles to electronic commerce under existing international Conventions, without the burdensome necessity of their individual amendment.

Article 20 (2) provides a so called ‘opt out’ approach. According to article 20 (2) the Convention applies to electronic communication in contracts which fall within the scope of any other international instrument (not listed in subsection (1)), to which the state has become or may become a contracting state, unless the state declares not to be bound by this provision, in other words: opts out of this provision.

Nevertheless, if a state ‘opts-out’ of article 20 (2), it still has the possibility to declare that it will apply the Convention to contracts which fall under a specified international instrument (so called ‘opt-in’ approach in article 20 (3)).

Additionally, article 20 (4) gives the state the possibility to opt-out of a specified international instrument, including the Conventions listed under subsection (1), if it has not made the general opt-out declaration under article 20 (2).

The very flexible system of giving the possibility to opt-out and opt-in gives the contracting states a choice of which international instruments the Convention

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\(^79\) Polanski, ‘Convention of E-Contracting’, p. 3
should apply to and in which direction the scope of application of the Convention should be limited or extended.

Although the flexibility has positive sides, such flexibility reduces the harmonization and uniformity of law the Convention intended to create. Nevertheless the Working Group argued that the rapidly changing technologies of communication justify such flexibility.

Article 21 describes the procedure to be observed for declarations on the scope of application pursuant to article 19 (1) (2) and article 20 (2) (3) (4) as well as declarations under article 17 (4), which refers to participation by regional organisations.

III. Key provisions: Use of electronic communications in international contracts

1.) Treatment of electronic communication and contracts

The Electronic Contracting Convention has the goal to improve legal certainty when it comes to electronic contracts. Consequently it deals with and tries to clarify the crucial questions with respect to the treatment of electronic contracts. Articles 8, 11 and 12 of the Convention provide answers to the important questions concerning the validity of electronic communications and contracts, the problems of electronic offers and the formation of contracts by automated data systems. These issues are crucial in electronic commerce, as they decide about the legal treatment and existence of the contracts formed by electronic means, and the Electronic Contracting Convention is the first international law instrument to address them.

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81 For more details see: ‘Explanatory note’, paras. 290-303.
82 An example for such organisation is the European Commission.
a.) Validity of electronic contracts: Article 8

Article 8 (1) establishes the fundamental rule, that a communication or a contract shall not be denied validity or enforceability solely for the reason of it being in electronic form. Consequently this provision gives equal status to paper-based and electronic communications by embodying the principle of non-discrimination and functional equivalence of communications. Both principles refer to two situations: first to the particular case of contracts formed by the exchange of electronic communications and second the general use of electronic means to convey any statement, declaration, demand, notice or request in connection with a contract. The Working Group considered various suggestions to clarify the reference either to contracts or to communications, which do not give rise to a contract, but eventually agreed that the current text, when read in conjunction with the definitions of ‘communication’ and ‘electronic communication’ in article 4(a) and (b) already covered both situations.83

In structure and wording this provision is very similar to articles 5 and 11 of the Model Law on Electronic Commerce84, which also embodies the principle of non-discrimination.

Article 8 (2) embodies the principle of party autonomy and clarifies that the Convention does not require a party to use or accept electronic communication, but their agreement to do so may be inferred from their conduct.

This provision differs slightly from the provisions in the Model Law on Electronic Commerce: First it does not contain a provision which explicitly contemplates situations where parties may not agree to accept or use electronic communications in contract formation, and second it increases the standard set out in the Model Law by specifying that agreements to use electronic communications can be

83 Report, A/CN.9/571, paras. 120, 121.
84 See article 5 of the Model Law on Electronic Commerce: ‘Information shall not be denied legal effect, validity or enforceability solely on the grounds that it is in the form of data message.’ Article 11 of the Model Law on Electronic Commerce: ‘In the context of contract formation, unless otherwise agreed by the parties, an offer and the acceptance of an offer may be expressed by means of data messages. Where a data message is used in the formation of a contract, the contract shall not be denied validity or enforceability on the sole ground that a data message was used for that purpose.’
inferred from the parties’ conduct. Although there is a subtle difference, the difference in wording can be attributed to the increased use and acceptance of electronic communications in contract formation.85

Although the Convention recognizes the legal validity of electronic communications, the Convention does not contain provisions which clearly state, when a contract is concluded, as it is stated in the provisions of the CISG86, and the Convention does not venture into determination when offers and acceptances of offers become effective for purposes of contract formation.87

Furthermore the Convention does not mention a signature as a requirement of validity, as the Working Group correctly recognized that most legal systems did not impose a general signature requirement as a condition for the validity of all types of contract.88

b.) Websites as invitations to make offers: Article 11

Generally speaking, article 11 of the Convention deals with the legal qualification of internet websites. It constitutes that electronic communications which are not addressed to one or more specific parties, but are 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, are 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. Consequently it can be said that, as a general rule, web-based sellers should be treated as presenting non-binding statements of intentions to enter into a contract, unless they address the electronic communication to one or more specific persons or they clearly indicate the intention to be bound in case of acceptance.89

86 See articles 14 to 24 of the CISG. The issue of contract formation will be discussed later in Chapter 2, III, 3.) and in Chapter 3, II, 3.) a.)
89 Polanski, ‘Convention of E-Contracting’, p. 5.
The regulation is similar to article 14 CISG, which provides in the first paragraph, that ‘a proposal for concluding a contract that is addressed to one or more specific persons constitutes an offer if it is sufficiently definite and indicates the intention of the offeror to be bound in case of acceptance’, and in its second paragraph that ‘a proposal other than in paragraph one is to be treated as an invitation to make offers, unless the contrary is clearly indicated by the person making the proposal’.  

Neither the Model Law on Electronic Commerce nor the Model Law on Electronic Signatures contains comparable provisions dealing with invitation to make offers.

The legal treatment of electronic communications such as websites and its classification either as binding offers or as invitations to make offers is not only very crucial for electronic commerce but also has enormous consequences for sellers and buyers in the world wide web.

The Working Group also noticed the importance and difficulty of this issue and discussed it in great detail. It was clear for the Working Group that it has to strike the balance between a trader’s possible intention of being bound by an offer, on the one hand, and the protection of parties acting in good faith, on the other hand, and to allocate these risks.

It was agreed that if a website only offers information about a company and the products and the contracts lie outside the electronic medium, there can be no difference to a conventional advertisement, which is doubtlessly treated as a non-binding invitation to make offers.

On the contrary, for websites with interactive applications where immediate conclusion of a contract is possible, it was discussed to treat them as binding offers ‘open for acceptance while stock lasts’. This qualification is known in legal literature as well as in international trade. Nevertheless the Working Group felt,

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90 The provision and its relevance in electronic contracts will be discussed in detail in Chapter 3, II, 1.) b.)
91 Legal aspects, A/CN.9/WG.IV/WP.104/ Add. 1, para. 5, 8.
93 See for example: Glatt, ‘Comparative issues’, p. 50.
that the specific risks of electronic communication and the unlimited reach of the internet demands for caution and an adequate solution. The pros of a qualification of websites as binding offers, such as legal certainty, and the contras, such as the liability of the seller to fulfil all purchasing orders from a potentially unlimited number of buyers, were deliberated. Eventually it was agreed that a seller offering goods on the internet with limited stocks of goods is more worthy of being protected. It also was argued that any other decision would oppose business practice as companies offering goods on internet typically indicate on their websites that they are not bound by those advertisements.94

This rule also does not collide with certain court decisions on these issues. Especially in Germany diverse courts ruled in cases concerning internet auctions (such as the internet auction portal www.ebay.de). An early decision of a district court95 found, that a person offering goods through an internet auction had not made a binding offer, but had merely invited to make offers, was reversed by the court of appeal96, which ruled that the display of goods for auction on the internet does not constitute solely an invitation to make offers, but a binding contractual offer. This view was followed by other German courts97 and was finally confirmed by the German Federal Court.98 Also an American court came to the same decision in a comparable US case.99

In case of internet auctions the above mentioned risk of the seller to be bound to fulfil potentially unlimited orders does not exist, as the seller only has to accept the highest effective bidder and not (potentially) unlimited orders from unlimited buyers.

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94 Legal aspects, A/CN.9/WG.IV/WP.104/Add. 1, para. 10.
Consequently internet auctions and other similar transactions\textsuperscript{100} fall under the exception of article 11: ‘unless it clearly indicates the intention of the party making the proposal to be bound in case of acceptance’.\textsuperscript{101}

Nevertheless the provision can be criticised, as it fails to take into account, that registration in any online system can be regarded as a communication addressed to a specific person.\textsuperscript{102} For diverse websites that require a log-in or registration this could lead to the qualification as binding offers, as they would be addressed to a specific group of persons (who are registered or logged-in). In my opinion, those websites also have to be classified as invitations to make offers, since the offeror can not specify the potential persons to register and a registration or log-in takes place without special requirements and can usually be done within minutes. This risk can not be burdened on the seller. The same applies for ‘interactive applications’.\textsuperscript{103} However, this issue creates great legal uncertainty.

Furthermore the provision omits to define what exactly an invitation to make offers is and which legal consequences it has. Despite the fact that the notion of invitation to make offers is common in uniform international trade law texts, as for example in the CISG, it is completely unknown in some legal systems. Finally, it uses the confusing term ‘interactive applications for the placement of orders’ rather than ‘automated message system’ used elsewhere in the text (especially in article 12 and article 4 (g), that will be discussed below), which might lead to unnecessary problems of interpretation in the future.\textsuperscript{104}

c.) Use of automated message systems for contract formation: Article 12

Article 12 of the Convention deals with the validity of contracts formed by automatic means and provides ‘that a contract formed by an interaction of an automated message system and a natural person, or by an interaction of automated

\textsuperscript{100} For example such as ‘click-wrap’ agreements, where Internet service providers or online purchases of software or other digitalized information through web sites are allowed online download of software or immediate connection to a provider of Internet access services.


\textsuperscript{102} Polanski, ‘Convention of E-Contracting’, p. 5.

\textsuperscript{103} ‘Explanatory note’, para. 205.

\textsuperscript{104} Polanski, ‘Convention of E-Contracting’, p. 5.
message systems can not be denied validity, even if no natural person reviewed or intervened in each of the individual actions carried out by the automated message systems or the resulting contract’. The term ‘automated message system’ is defined in article 4 (g) as ‘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’.

Thus a contract can be formed and is valid without any human interaction by one or both sides. A well known example of the automated message system is the website of the book shop www.amazon.com. It is a website, which accepts book purchases and online payments without any human intervention.

The provision of the Convention on Electronic Contracting was inspired by article 13 (2) (b) of the Model Law on Electronic Commerce, nevertheless the two provisions are not identical in purpose.

Article 13 (2) (b) of the Model Law is concerned with the attribution of messages sent by an automated information system, whereas the nature of article 12 of the Convention is more of a non-discrimination rule. The issue of attribution of electronic communication is not dealt with in the Electronic Contracting Convention at all. Although the Working Group noticed that the provision might be redundant, since the issue is already being covered by the non-discrimination rule of article 8 (1), they preferred to complement the article with clear provisions on recognition of electronic communications exchanged under automated data systems.

With exception to the general rule on attribution in article 13 (2), the Model Law on Electronic Commerce does not deal with automated data systems.

In connection with article 12 of the Convention one must clarify, that the notion ‘electronic agent’, although it had been often used as a synonym for an automated

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105 Another example is the German catalogue mail-order company www.otto.de.
106 Chong/Chao, ‘UN Convention’, p. 126.
107 Article 13 (2) (b) of the Model Law on Electronic Commerce provides that, as between the originator and the addressee, a data message is deemed to be that of the originator if it was sent ‘by an information system programmed by, or on behalf of, the originator to operate automatically’.
data system in connection with the Electronic Contracting Convention\textsuperscript{110} for purposes of convenience, has a different meaning.

There is no analogy between an automated data system and a sales agent, as general principles of agency law, such as principles involving limitation of liability as a result of the faulty behaviour of the agent, can not be used in connection with the operation of automated data systems.\textsuperscript{111}

Nevertheless the general principle remains that the person, whether it is a natural person or a legal entity, on whose behalf a computer was programmed is responsible for any message generated by the machine and is bound by the contract formed by that means.\textsuperscript{112}

The rule contained in article 12 does not contravene or override the requirement of a ‘human actor’ with a ‘human will’, that is necessary in some legal systems for the formation of a contract.

In diverse civil law systems, like the German civil system a declaration of a human intention is a compulsory requirement for any formation of a contract.\textsuperscript{113} Consequently there is the requirement of a will or an intention to act by the person declaring the intention to form a contract.\textsuperscript{114}

Article 12 of the Convention addresses this requirement of a ‘will’ by recognizing the validity of actions carried out by automated message systems.\textsuperscript{115} Although the automated data system does not have a human will or intention when the contract is formed, it is obvious that the person who programmed the system had the intention to form contracts.

\textsuperscript{110} See e.g.: Faria, ‘An introductory note’, p 691 or Martin, ‘Electronic Contracts Convention’, p. 295.

\textsuperscript{111} Legal aspects, A/CN.9/WG.IV/WP.104/ Add. 4, para. 3.

\textsuperscript{112} ‘Explanatory note’, para. 212.

\textsuperscript{113} Palandt, \textit{Kommentar}, Einf v § 116, para. 1.

\textsuperscript{114} Palandt, \textit{Kommentar}, Einf v § 116, para. 16.

\textsuperscript{115} Chong/Chao, ‘UN Convention’, p. 126.
d.) Contract terms: Article 13

A further question in connection with electronic contracts, which the Working Group had to deal with, was the question of availability of contract terms as well as the incorporation of standard terms and conditions and ‘battle of forms’. Whereas in traditional paper based contracts the parties’ negotiations result in some tangible record of transaction to which the parties can refer in case of doubt and disputes, electronic contracts, which exist for example as a data message may only be temporarily retained or may be available only to the party through whose information system the contract was formed.\(^\text{116}\)

Consequently the Working Group was challenged to decide how to deal with these issues of contract terms in the Convention on Electronic Contracting. Although there was initially a draft provision that intended to regulate the availability of contract terms\(^\text{117}\), the prevailing view was that the issue is a question of domestic laws.

In favour of that decision it was stated that the initial variant would impose more stringent requirements on the contracting parties than those for paper based contracts, without any reason for such differentiated treatment. Additionally it would create a duality of regimes for traditional and electronic communications. It was also considered that it would not be feasible to formulate an appropriate set of possible consequences for failure to comply with a requirement to make available contract terms and that it would be pointless to establish this type of duty in the Convention if no sanction was created.\(^\text{118}\)

Furthermore it was argued, that the provision was not necessary since article 14 and 19 CISG provide the necessary regulatory framework for cases of insufficient definition of the proposal and of subsequent alteration of the terms of the proposal. Another argument was that the initial variant echoed provisions aimed at

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\(^\text{116}\) Legal aspects, A/CN.9/WG.IV/WP.104/ Add. 4, E, para. 19.

\(^\text{117}\) Another variant for the present article 13 was: ‘A party offering goods or services through an information system that is generally accessible to persons making use of information systems shall make the electronic communication or communications which contain the contract terms available to the other party [for a reasonable period of time] in a way that allows for its or their storage and reproduction.’

\(^\text{118}\) ‘Explanatory note’, para. 221.
consumer protection, which was clearly out of the scope of the draft Convention.\textsuperscript{119}

The current article 13 of the Convention does not impose any obligations on the parties to make the contract terms available in any particular manner. The provision leaves it to domestic law\textsuperscript{120} how to treat this issue, hence it does not relieve the parties from any obligation they may have to comply with domestic legal requirements that may impose a duty to make contract terms available, for instance, pursuant to regulatory regimes governing the provision of online services, especially under consumer protection regulations.\textsuperscript{121}

Consequently also issues of incorporation of standard terms and conditions and ‘battle of forms’ have to be solved under the domestic law.

On the one side, this solution of the problem avoids a duality of regimes for electronic and paper based communications and is consistent with the facilitative, rather than regulatory approach of the Convention.\textsuperscript{122}

Nevertheless it can be criticised, that this provision does not achieve the Convention’s goal of unification and legal certainty in the field of electronic commerce. It is evident, that the Convention can not create uniform rules for substantive contractual issues that are not specifically related to electronic commerce. However the Working Group agreed that they should not hesitate to formulate substantive rules, where they are needed to ensure the effectiveness of electronic communications.\textsuperscript{123} By now, the legal approaches of the problem in domestic laws differ so extremely\textsuperscript{124} that it is far away from uniformity, predictability and legal certainty.

\textsuperscript{119} Report, A/CN.9/571, para. 178.
\textsuperscript{120} ‘Any rule of law’ in this article has the same meaning as the words ‘the law’ in article 9. See remarks in footnote 145.
\textsuperscript{122} Faria, ‘An introductory note’, p 691.
\textsuperscript{123} Report, A/CN.9/527, para. 80, 81.
\textsuperscript{124} For a short overview over the regulations in diverse domestic law systems, see, Legal aspects, A/CN.9/WG.IV/WP.104/ Add. 4, E.
e.) Electronic mistake: Article 14

A further similar problem, the Working Group was confronted with, was the regulation of mistakes and errors in electronic commerce. The result of a controversy debate is article 14 of the Convention. In paragraph (1) the provision gives a natural person who had made an input error in an electronic communication exchanged with an automated message system, that does not provide the person with an opportunity to correct the error, the right to withdraw the portion of the electronic communication in which the error was made, if, firstly, the person notifies the other party about the error as soon as possible after learning about the error, and, secondly, if the person has not used or received any material benefit or value from the goods or services received.

It is important to point out, that the possibility contained in article 14 (1) applies to natural persons only. Errors generated by information systems are not covered. Moreover the right to withdraw is limited to input errors made in a communication with an automated data system. Consequently passive websites, email, chat or EDI\textsuperscript{125} are also not included.\textsuperscript{126} However, the right to withdraw the portion of the electronic communication is not a right of the natural person but of the party on whose behalf the person was acting.\textsuperscript{127}

All other types of errors other than the above mentioned are intended to be dealt with in domestic law.\textsuperscript{128} This is, as a support, also expressed in article 14 (2) of the Convention. The provision permits the withdrawal of the portion only, in which the input error was made. The consequence of the withdrawal depends on the nature of the portion withdrawn.\textsuperscript{129} If the portion concerned an ‘essentallium negotii’, an essential term for a contract for the sale of goods, like the quantity of goods, the price or the identity of the parties, the transaction would become invalid.

\textsuperscript{125} EDI is the computer-to-computer transmission of information used by frequently contracting commercial parties to send and receive standard forms - generally purchase orders and invoices - in a store and forward message system.
\textsuperscript{126} Polanski, ‘Convention of E-Contracting’, p. 6.
\textsuperscript{127} ‘Explanatory note’, para. 229.
\textsuperscript{129} Chong/Chao, ‘UN Convention’, p. 128.
However, article 14 (1) does not provide the right for ‘correcting’ errors or ‘modifying’ the original communication, as it was felt that the typical consequence of an error in most legal systems was to enable the party to avoid the effect of the transaction, and a right to correct an error would require a modification of the communication. That would entail additional costs for the system provider and would require it to keep the original offer open.\textsuperscript{130} A further condition is that the automated data system does not provide a possibility to correct the error.\textsuperscript{131} The provision does not impose an obligation on the business to introduce methods of error identification and correction, as for example article 11 (2) EU Directive on Electronic Commerce does.\textsuperscript{132}

The withdrawal is also only possible, when the person notifies the other party without delay and does not have benefits, such as downloads of a software programme.

The provision was created, as it was felt, that in electronic commerce, especially in communications exchanged with an automated data system, the risk of human errors was higher than in traditional paper based communications, since the transactions are made nearly instantaneous and one side of the transaction is not a natural person.\textsuperscript{133} Although the Working group doubted if such a provision might not be appropriate for business contracts and would be better suited in the context of consumer contracts, it was decided in favour of the provision for the just mentioned reasons.

No regulation in both model laws and other international legal instrument dealing with electronic commerce is to be found on that issue.

It could be criticised that this provision creates special substantive standard for an electronic communication, which does not exist for a non-electronic communication and consequently goes far beyond the Convention’s goal of functional equivalence. However, it seems necessary to formulate a substantive rule on a specific problem concerned with communications by means of

\textsuperscript{130} Report, A/CN.9/571, paras. 193, 194.
\textsuperscript{131} Explanatory note, para. 239.
\textsuperscript{132} For more information about the EU Directive on Electronic Commerce: Campbell, \textit{E-commerce}, p. 733-750.
\textsuperscript{133} Report, A/CN.9/509, para. 105. Legal aspects, A/CN.9/WG.IV/WP.104/ Add. 4, D, para. 8
automated message systems to provide the effectiveness of electronic commerce. ¹³⁴ Moreover, the regulation does not collide with substantive law on mistakes, since it is a very limited substantive rule, which leaves errors other than those in electronic communications with automated data systems to be dealt with in domestic law. Consequently no duality of regimes is created and there is no interference with well established notions of contract law. ¹³⁵

Another point of criticism could be that it only provides for consequences of input errors, but does not impose obligations to avoid them. ¹³⁶

It is common practice in electronic commerce, that the online vendor is obliged to provide means of identifying and correcting input errors by methods like including the automatic check of email addresses for presence of the @ symbol, the double typing of email addresses, the verification of postal codes or credit card numbers or the double conformation screen. ¹³⁷ Although the possibility has been deliberated by the Working Group, they did not accept proposals to reformulate the article as a positive obligation to provide a method for correcting errors prior to the dispatch of the communication, as it was felt that such a prescriptive provision was incompatible with the enabling nature of the draft Convention. ¹³⁸ Another obstacle was the determination of legal consequences of a failure, as the consequences of a failure to comply with article 11 EU Directive on Electronic Commerce for example, caused great problems in the implementation of the Directive in national law. ¹³⁹

Some criticise additionally that the provision does not impose strict time limits and the term ‘as soon as possible after learning of error’ is not defined good enough. ¹⁴⁰ This can cause legal uncertainty and contravenes the Convention’s goal of eliminating uncertainties in electronic commerce

¹³⁹ For an overview over the diverse consequences in different states and the thereby caused problems, see: Report, A/CN.9/509, para. 105. Legal aspects, A/CN.9/Q11/IV/WP.104/ Add. 4, D, para. 10.
2.) Form requirements

Article 9 of the Electronic Contracting Convention deals with form requirements concerning electronic communications and sets out default minimum standards for enabling functional equivalents of electronic communications to traditional paper-based form requirements. The form standards concern writing requirements, handwritten signatures and the requirement of originality.

The provision is mainly based on the rules contained in article 6, 7 and 8 of the Model Law on Electronic Commerce, which also intend to establish functional equivalence between electronic communications and paper-based documents. Nevertheless, article 9 of the Convention differs on several points from the previous provisions of the Model Law. While the Model Law contained a number of separate articles for creating electronic equivalents for the requirements of writing, signatures and retention of electronic messages, all enabling provisions in the Convention are in the same article.141 Furthermore, unlike the Model Law, the Electronic Contracting Convention does not deal with record retention, as it was felt, that such a matter was more closely related to rules of evidence and administrative requirements than with contract formation and performance.142

a.) Freedom of form: Article 9(1)

Article 9 (1) of the Convention states, that ‘nothing in this Convention requires a communication or contract to be made or evidenced in any particular form’. It is obvious that with this provision, the Convention follows the general principle of freedom of form already enshrined in the CISG.143 However the Convention recognizes that form requirements may exist under the national applicable law, such as writing or signature requirements, when for

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143 Article 11 CISG: ‘A contract of sale need not be concluded in or evidenced by writing and is not subject to any other requirement as to form. It may be proved by any means, including witnesses.’
example a state party to the CISG has made a reservation under article 96 of the CISG\textsuperscript{144}, and addresses them in the subsections (2) - (5).

b.) Requirement of writing: Article 9 (2)

Article 9 (2) establishes that the requirement of writing by law\textsuperscript{145} is met by electronic communication, if ‘the information contained is accessible and usable for subsequent reference’.

In practice, communication that is capable of being reproduced would be considered as being written down.\textsuperscript{146}

Nevertheless the problem remains, how to interpret ‘for subsequent reference’.

The notion was preferred to notions such as ‘durability’ or ‘non-alterability’, which would have established too harsh standards, and to notions such as ‘readability’ or ‘intelligibility’, which might constitute too subjective criteria.\textsuperscript{147}

However, whether the display of websites on the recipient’s monitor fulfils the condition of ‘subsequent reference’ and therefore constitutes ‘writing’\textsuperscript{148} in terms of the Convention could not be solved unambiguously. Article 9 (2) does not state clearly, whether it requires electronic communication to be accessed and retrieved unmodified, so that websites, as long as they are not downloaded or stored on the recipient’s data medium, in my opinion, do not fulfil the condition in article 9 (2), since they can be modified by the website operator without any knowledge of the other party. From my point of view a subsequently modified website can not be used for ‘subsequent reference’ in terms of article 9 (2).

\textsuperscript{144} Legal aspects, A/CN.9/WG.IV/WP.104/ Add. 4, C, para. 2. The problem of a reservation under article 96 CISG and its range will be discussed later in detail in Chapter 3, II, 2.) c.)

\textsuperscript{145} ‘Law’ means the applicable law. However, In the context of the Electronic Communications Convention, however, ‘the law’ refers also to those various sources of law and are intended to encompass not only statutory or regulatory law, including international conventions or treaties ratified by a contracting State, but also judicially created law and other procedural law. Explanatory note, para. 139. The Working Group considered to define the term ‘law’, as it may be ambiguous, but decided finally in favour of an explanation in an explanatory note, see: Report, A/CN.9/571, para. 125.

\textsuperscript{146} Polanski, ‘Convention of E-Contracting’, p. 7.

\textsuperscript{147} ‘Explanatory note’, para. 146.

\textsuperscript{148} This problem will be discussed in detail in connection with article 13 CISG in Chapter 3, II, 2.) b.)
c.) Requirement of signature: Article 9 (3)

Article 9 (3) deals with the law’s requirement of signature. According to this provision the requirement is fulfilled for electronic communications, if firstly, ‘a method is used to identify the originator of the communication and to indicate the originator’s intention regarding the information contained in the electronic communication’ (article 9 (3) (a)). And secondly, the method used in article 9 (3) (a) should be as reliable as appropriate for the purpose for which the electronic communication is generated or communicated, in the light of all the circumstances, including any agreement between the originator and the addressee (article 9 (3) (b) (i) ‘reliability in principle’) or ‘be proven in fact to identify the party and indicate their intention’ (article 9 (3) (b) (ii) ‘reliability in fact’).

The first option contained in article 9 (3) (b) is a more theoretical determination of reliability, whereby circumstances surrounding the electronic signature are also considered to determine the reliability. In contrast, the second option of article 9 (3) (b) refers to reliability in fact and allows evidence to prove that the signature fulfils the requirements set out in article 9 (a). When considering the ‘reliability in fact’, it was felt that the Convention should not allow a party to invoke the ‘reliability test’ to repudiate its signature in cases where the actual identity of the party and its actual intention could be proven. The requirement that an electronic signature needs to be ‘as reliable as appropriate’ should not lead a court or trier of fact to invalidate the entire contract on the ground that the electronic signature was not appropriately reliable if there is no dispute about the identity of the person signing or the fact of signing, that is, no question as to authenticity of the electronic signature, as such a result would be particularly unfortunate.

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149 The term of ‘electronic signature’ includes e.g. public-key, cryptograph, digitalised versions of handwritten signature, pins, clicking an ‘ok-button’ or biometric devices. For more details about diverse forms of electronic signature see: Guide to enactment the Model Law on Electronic Signatures, paras. 31-62.


151 Report, A/60/17, para 67.

Article 9 (3) of the Convention modifies the equivalent article 7 (1) in the Model Law on Electronic Commerce\textsuperscript{153}, which also contains the ‘reliability test’.

However article 7 (1) (a) of the Model Law on Electronic Commerce uses the notion ‘indicated that party’s approval’, whereas article 9 (3) (a) of the Convention refers to ‘intention’. Although the difference is very slight and will be relevant in a very limited number of cases, the definition of the Convention is more flexible and has a slightly broader applicability.\textsuperscript{154}

Furthermore the Convention does not deal with the attribution of electronic messages, as article 7 and 13 Model Law on Electronic Commerce\textsuperscript{155} did. Although the Working Group previously wanted to cover the question of attribution, they finally decided to omit regulations on this issue.\textsuperscript{156}

Also article 6 (3) of the Model Law on Electronic Signatures\textsuperscript{157}, which has been widely criticised for being not technologically neutral, could be improved by article 9 (3) (b) of the Convention.

Despite the improvement in relation to both Model Laws, article 9 can be criticized for being too general and possibly being problematic, when it comes to application in practice or to other technologies to rely on in court proceedings.\textsuperscript{158}

\textsuperscript{153} Article 7: ‘(1) Where the law requires a signature of a person, that requirement is met in relation to a data message if: (a) a method is used to identify that person and to indicate that person’s approval of the information contained in the data message; and (b) that method is as reliable as was appropriate for the purpose for which the data message was generated or communicated, in the light of all the circumstances, including any relevant agreement.’


\textsuperscript{155} Article 7 and 13 of the Model Law on Electronic Commerce affirmed the validity of electronic signatures and allowed the attribution of a message to an originator as long as the addressee used a method agreed upon with the originator to verify the authenticity of the message, without the need to demonstrate the authenticity of the signature itself.

\textsuperscript{156} Report, A/CN.9/571, para. 127.

\textsuperscript{157} Text of article 6 (3) of the Model Law on Electronic Signatures: ‘An electronic signature is considered to be reliable for the purpose of satisfying the requirement referred to in paragraph 1 if: (a) The signature creation data are, within the context in which they are used, linked to the signatory and to no other person; (b) The signature creation data were, at the time of signing, under the control of the signatory and of no other person; (c) Any alteration to the electronic signature, made after the time of signing, is detectable; and (d) Where a purpose of the legal requirement for a signature is to provide assurance as to the integrity of the information to which it relates, any alteration made to that information after the time of signing is detectable.’

\textsuperscript{158} Polanski, ‘Convention of E-Contracting’, p. 7.
d.) Requirement of originality: Article 9 (4) and (5)

Article 9 (4) of the Convention provides a new rule for the electronic functional equivalent of an original document. Thus, the requirement of an original form is met, if ‘there is a reliable assurance as to the integrity of the communication’ (article 9 (4) (a)) and ‘the information is capable of being displayed to the person whom it is to be made available’ (article 9 (4) (b)). Supplementary, article 9 (5) contains further provisions on assessing the integrity of a communication.159

Initially the Working Group considered the inclusion of a provision on the electronic functional equivalent of an original in order to cover electronic arbitration agreements under the Convention on the Recognition and Enforcement of Foreign Arbitral Awards160, as pursuant to article II and IV of the United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York, 10 June 1958) (‘New York Convention’) the party who relies on the arbitration agreement is required to produce its original or a duly certified copy thereof.

It was inevitable that the Convention on Electronic Contracting has to deal with that issue, since, according to article 19, the Convention applies to arbitration agreements governed by the New York Convention. Therefore article 9 (4) and (5) of the Convention were originally inserted to address the problem of arbitration agreements.

However by its present wording article 9 (4) and (5) also cover other issues concerning original form.161 The Working Group dismissed a limitation of the scope of article 9 (4) and (5) to arbitration agreements only, as it was felt that an extension to other original documents was useful.162

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159 Text of article 9 (5): ‘For the purposes of paragraph 4 (a): (a) The criteria for assessing integrity shall be whether the information has remained complete and unaltered, apart from the addition of an endorsement and any change that arises in the normal course of communication, storage and display and (b) The standard of reliability required shall be assessed in the light of the purpose for which the information was generated and in the light of all the relevant circumstances.’

160 Report, A/60/17, para. 17.

161 Examples of documents that might require an ‘original’ and which are covered by article 9 are trade documents such as weight certificates, agricultural certificates, quality or quantity certificates, inspection reports, insurance certificates, etc. ‘Explanatory note’, para. 167.

Moreover it is important to point out that the provision does not deal with the question of originality itself, as the Convention is not concerned with rules of evidence.\(^{163}\)

Recapitulating, it can be said that despite a clear improvement to the previous legal situation concerning form requirements, the provisions can be criticised as being too general and vague. This can lead to difficulties when it comes to apply them in practice.\(^{164}\)

3.) Contract formation; Time and place of dispatch and receipt of electronic communications: Article 10

Article 10 of the Convention on Electronic Contracting provides a set of rules on the time and place of dispatch and receipt of electronic communications.

a.) Formation of contracts

It is apparent that the provisions of article 10 are crucial for determining, whether and when a contract is formed by electronic means. However, in its present version the provision is not limited to the formation of contracts and deals more broadly with the use of data messages ‘in connection with an existing or contemplated contract’ or ‘in the context of the formation or performance of contracts’.\(^{165}\) Accordingly, the rules on time and place of dispatch and receipt of electronic communications contained in article 10 of the Convention are intended to apply to all electronic messages exchanged either before or after the conclusion of a contract or even where no contract is finally concluded.\(^{166}\)

Nevertheless the crucial question remains, when a contract is concluded. The Convention on Electronic Contracting states nothing about a rule on formation of contracts.

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\(^{163}\) Report, A/CN.9/571, para. 129.


\(^{165}\) Legal aspects, A/CN.9/WG.IV/WP.103, Annex, para.1.

\(^{166}\) Legal aspects, A/CN.9/WG.IV/WP.104/ Add. 2, B, para. 1.
contract. The jurisdiction and jurisprudence on contract formation by electronic means is inconsistent and differs in various countries and various law systems.

Typically one often distinguishes between ‘instantaneous’ and ‘non-instantaneous’ communication of offer and acceptance or between communication exchanged between parties present at the same place and time (inter praesentes) or communications exchanged at a distance (inter absentes). Generally, unless the parties engage in ‘instantaneous’ communication or are negotiating face-to-face, a contract will be formed when an ‘offer’ to conclude the contract has been expressly or tacitly ‘accepted’ by the party or parties to whom it was addressed. Mostly electronic communications are non-instantaneous communications, since they are exchanged at a distance.167

Nevertheless, the point of time when the acceptance of the offer becomes effective varies in diverse theories that are applied in different legal systems.168 The CISG for example has adopted the ‘reception’ theory for contract formation, which also is most commonly applied for business transaction.169

However, the Working Group’s view was that it should not attempt to provide a rule on the time of contract formation that might be at variance with the rules on contract formation of the law applicable to any given contract (problem of duality of regimes).170 It was also felt that a substantive provision on that issue would exceed the aim of the Convention. Instead, the Convention should offer guidance that allows for the application, in the context of electronic contracting, of the concepts traditionally used in international conventions and domestic law, such as ‘dispatch’ and ‘receipt’ of communications.171

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167 The problem of other than non-instantaneous electronic communications will be discussed in detail in Chapter 3, II, 3.) c.)
168 There are four main theories: the ‘declaration’ theory, the ‘mailbox rule’ theory, the ‘reception’ theory, the ‘information’ theory on this issue. For a short overview over the theories, see: Legal aspects, A/CN.9/WG.IV/WP.104/Add. 2, B, paras. 3-7.
169 The issue of contract formation by electronic means under the CISG will be discussed in detail in Chapter 3, II, 3.) a.)
170 Report, A/CN.9/528, para. 103; see also Report, A/CN.9/546, paras. 119-121.
171 ‘Explanatory note’, para. 175.
Furthermore, article 10 does not address the efficacy of the electronic communication that is sent or received or the question whether it binds any party.\textsuperscript{172} The issue is left to domestic law.

Although the drafters’ arguments are plausible, the lack of an expressed rule on contract formation definitely contravenes the Convention’s goal of international uniformity and harmonisation of the legislation on electronic commerce.

b.) Time of dispatch of electronic communications

Article 10 (1) of the Convention determines the time of dispatch of electronic communication as the point in time when the communication leaves an information system under the control of the originator or if the electronic communication has not left an information system under the control of the originator, when the communication is received. Thereby the term ‘information system’ is defined in article 4 (f) as: ‘a system for generating, sending, receiving, storing or otherwise processing data messages’.

An example for a scenario, referred to in the second alternative of article 10 (1), where a communication does not leave a system, is a posting on an internet website or where the originator and the addressee are both using the same information system.\textsuperscript{173}

This provision was generally based on the corresponding article 15 (1) Model Law on Electronic Commerce.\textsuperscript{174} However article 15 (1) Model Law on Electronic Commerce has been criticised for its complexity and its inopportuneness for the new developed internet and email technology.\textsuperscript{175} Therefore the Working Group decided to choose a different wording than the Model Law and define the time of dispatch as the ‘time when the communication leaves the system’ rather than when ‘it enters an information system outside the control of the originator’.

\textsuperscript{172} ‘Explanatory note’, para. 176.
\textsuperscript{173} Chong/Chao, ‘UN Convention’, p. 131.
\textsuperscript{174} Wording of article 15 (1) of the Model Law on Electronic Commerce: ‘Unless 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.’
\textsuperscript{175} Legal aspects, A/CN.9/WG.IV/WP.104/ Add. 2, B, paras. 32-35.
Consequently it can be said, that article 10 (1) of the Convention is an improvement compared to the adequate provision in the Model Law, as it takes into account new technological developments and is better suited for the technology of internet or email. Furthermore the provision is more logical and practically convenient and is more appropriate for evidentiary purposes, since it is easier to gather information when a message has left an information system under a party’s control rather than when it enters an information system outside the originator’s control.  

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c.) Time of receipt of electronic communications

Article 10 (2) of the Convention determines the time of receipt of electronic communications and contains an evidentiary presumption to facilitate the abovementioned determination.

The rule distinguishes between an electronic communication sent to an address designated by the addressee and an address other than the designated address. For the first scenario, it defines the time of receipt as ‘the time when the electronic communication becomes capable of being retrieved by the addressee at the designated electronic address.’

In the other case, it additionally requires the addressee to become aware that the communication has been sent to that particular address.

Finally, the third part of the provision contains the presumption that an electronic communication is capable of being retrieved when it reaches the addressee’s electronic address. This presumption is rebuttable and if the addressee is able to show that the electronic communication was not capable of being retrieved by reasons of being blocked by a firewall or a spam filter, there is no receipt in terms of this provision.  

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The provision is in principle based on article 15 (2) Model Law on Electronic Commerce. Nevertheless it was modified by the abovementioned requirements.

178 The wording of article 15 (2) Model Law on Electronic Commerce: ‘Unless otherwise agreed between the originator and the addressee, the time of receipt of a data message is determined as follows: (a) if the addressee has designated an information system for the purpose of receiving data
However, despite the different wording both provisions in the Model Law and in
the Convention lead to the same results, since ‘entry’ in an information system is
understood under article 15 of the Model Law as the time when an electronic
communication ‘becomes available for processing within that information
system’, 179 which is arguably also the time when the communication becomes
‘capable of being retrieved’ by the addressee in terms of the Convention. Hence,
the only substantive difference between the Convention and the Model Law
concerns the receipt of communications in the absence of any designation.

Furthermore the condition of the addressee’s ‘awareness’ was added.
It was felt, that the new condition of ‘awareness’ would discourage bad faith
attempts to bind the other part by sending electronic communication to an address
other than the address designated by the party.180 Although the new condition has
been criticised for being inconsistent with article 24 CISG181, since article 24
CISG does not draw a distinction between designated and non-designated
addresses182, is seems to be fair to link the receipt to a consent to use a particular
address and not compel persons who had not agreed to use a particular address to
bear the risk of loss of communication.183

Moreover it seems to be fairer to refer to the ‘capability of being retrieved’ than to
the ‘entry to the data system’184, since due to new developments such as spam
filters and anti virus programmes an electronic communication that enters a data
system is not always capable of being retrieved by the addressee.185 Article 10 (2)
meets this concern and does not burden the risk thereof on the addressee.

messages, receipt occurs: (i) at the time when the data message enters the designated information
system; or (ii) if the data message is sent to an information system of the addressee that is not the
designated information system, at the time when the data message is retrieved by the addressee; (b) if
the addressee has not designated an information system, receipt occurs when the data message enters
an information system of the addressee.’
180 Report, A/CN.9/571, paras. 155, 156.
181 Article 24 CISG will be discussed in detail in Chapter 3, II, 3.) c.)
184 As it was done in article 15 of the Model Law.
The provision prevents also fraudulent use by the addressee, since the Convention refers to the ‘capability’ and the addressee can not just refuse to retrieve an electronic communication after learning of its existence.\(^{186}\)

However the question of the legal effect of retrieval falls outside the scope of the Convention and is left for the applicable law.\(^{187}\)

Furthermore article 10 (2) refers to ‘electronic address’, which is a functional equivalent to the physical address, whereas the Model Law refers to ‘information system’. The notion ‘electronic address’ is not defined in the Convention, but it is generally understood as ‘a position or location in an information system used by a person for receiving messages’\(^{188}\). This understanding reflects better than the previous legal instruments the Convention’s goal of functional equivalence between electronic and paper based communications.

Nevertheless it can be considered as disadvantageous, that the provision may not suit for web-based commerce, where the information is usually recorded only by one information system.\(^{189}\)

d.) Place of dispatch and receipt of electronic communications

Article 10 (3) of the Convention deems the place of dispatch of electronic communications, as the originator’s place of business, and the place of receipt, as the addressee’s place of business. Since the place of business\(^{190}\) is the decisive factor, the location of the information system supporting the electronic address e.g. the server, does not determine the place of dispatch and receipt (article 10 (4)). This was considered important since very often the information system of the

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\(^{186}\) This risk existed under the rule of article 15 (2) Model Law on Electronic Commerce and under the CISG. The context of this risk under the CISG will be discussed in Chapter 3, II, 3.) cc.)


\(^{188}\) The term ‘electronic address’ may, depending on the technology used, refer to a communications network, and in other instances could include an electronic mailbox, a telecopy device or another specific portion or location in an information system that a person uses for receiving electronic messages. Report, A/CN.9/571, para. 157.


\(^{190}\) The question, how to determine the place of business in electronic commerce has been discussed in great detail under Chapter 2, II, 1.) c.).
addressee where the electronic communication is received, or from which the electronic communication is retrieved, is located in a jurisdiction other than that in which the addressee itself is located.191

Article 10 of the Convention resembles its predecessor, article 15 (4) Model Law on Electronic Commerce.192 Already the Model Law had to meet the challenge of determining the place of dispatch and receipt of electronic communication and cope with the demanding definition of the parties’ location in electronic commerce.

Both law instruments can be criticised for creating special rules for electronic communication, which does not exist for traditional paper based documents and thereby exceeding the goal of functional equivalence.

However it was considered necessary to create new substantive rules in order to ensure the effectiveness of electronic communications for transactional purposes.193

192 The wording of article 15 (4) Model Law on Electronic Commerce: ‘Unless otherwise agreed between the originator and the addressee, a data message is deemed to be dispatched at the place where the originator has its place of business, and is deemed to be received at the place where the addressee has its place of business. For the purposes of this paragraph: (a) if the originator or the addressee has more than one place of business, the place of business is that which has the closest relationship to the underlying transaction or, where there is no underlying transaction, the principal place of business; (b) if the originator or the addressee does not have a place of business, reference is to be made to its habitual residence.’
193 Chong/Chao, ‘UN Convention’, p. 133.
IV. General Provisions

Besides the key provisions on electronic communications, the Convention contains diverse general rules concerning, inter alia, party autonomy (article 3) and interpretation of the Convention (article 5).

I’m not going to go into detail, since the regulations are general and do not specifically concern electronic commerce, which is the main topic of this dissertation.

1.) Party autonomy: Article 3

Article 3 of the Convention gives the parties the power to agree on excluding, varying or derogating from the whole Convention or from a part of it. Consequently it preserves the widely known principle of party autonomy that can also be found in article 6 CISG and other legal instruments of private international law.

Nevertheless, the provision does not permit the parties to derogate from rules based on public policy considerations, such as relaxing statutory signature requirements in favour of methods of authentication that provide a lesser degree of reliability than electronic signatures, which are the minimum standard recognized by the Convention.194 Generally speaking, party autonomy does not mean that the parties are empowered to set aside statutory requirements on form or authentication of contracts and transactions.195

2.) Interpretation: Article 5

Article 5 provides guidance how to interpret the Convention. Pursuant to article 5 (1), the provisions of the Convention have to be interpreted with regard to its international character and the need to promote uniformity and the observance of good faith in international trade. Additionally gaps in the Convention are,

according to article 5 (2), to be settled in conformity with general principles on which it is based. In absence of such principles gaps are to be settled with the law applicable by virtue of the rules of private international law.

The provision is based on the corresponding article 7 CISG and mirrors its formulation. Pursuant to article 5 (1), there are three principles of interpretation: the internationality, uniformity and good faith. Article 5 (2) reflects, like its counterpart in the CISG, the autonomous character of the Convention, since the interpretation should be based on the principles contained in the Convention and only in absence of such general principles on the applicable law.196 The question is on which general principles the Convention is based, since no general principles are expressly stated in the provisions of the Convention (with the exception of the abovementioned principle of party autonomy in article 3.). Although some general principles, like functional equivalence and technological neutrality197 are stated in the preamble, which can be used to fill the gaps in the Convention, other principles on which the Convention is based have to be interpreted.

The question of interpretation and the problem of gap-filling were controversially discussed in association with article 7 CISG. In connection with gap-filling, the problems of analogy and principles ‘inside’ and ‘outside’ of the CISG gave reason for extensive debates.199 It would go far beyond the scope of this dissertation to present all the problems, but one should keep in mind, that similar problems might arise in connection with article 5 of the Convention.

A further severe point of criticism is that the Convention does not contain a counter-part regulation to article 9 (2) CISG, which establishes the recognition of the binding character of trade usage. It is difficult to understand, why the Working Group did not recognise the importance of commercial usages in electronic

197 The core principles have been already discussed in details in Chapter 2, I, 3.)
198 Explanatory note, para. 44.
199 For an overview see: Felemegas, ‘Article 7’
commerce, which are probably the most powerful source of norms in global electronic commerce.\textsuperscript{200}

VI. Assessment of the success and importance of the Convention on Electronic Contracting for International Trade

After the analysis and demonstration of the Convention’s scope of application, its key and general rules, the question to pose is, if the Convention has succeeded in reaching its goals and to what extent it will influence international trade.

1.) Success in reaching goals

As mentioned in the prior remarks, the Convention’s goals are to remove obstacles to electronic communications, create uniformity, legal certainty and predictability as to electronic contracting.

The above mentioned examination demonstrates clearly that the Convention sets new international standards for electronic commerce and modernizes the previous legal situation by modernizing existing legal instruments like the CISG and both the Model Laws, but also by creating new, by then non-existing provisions. The modernisation and creation of functional equivalence as well as of technological neutrality doubtlessly helps to remove obstacles to electronic contracting.

The best examples therefore are articles 8, 11 and 12, which predominantly intend to establish the functional equivalence and technological neutrality. Nevertheless the comments on article 11\textsuperscript{201} show that the drafters did not always succeed entirely.

The Convention is also a big step towards uniformity. Provided it will be adopted, the Convention is intended to supersede the relevant rules in domestic regulation

\textsuperscript{200} Polanski, ‘Convention of E-Contracting’, p. 8.
\textsuperscript{201} See, Chapter 2, III, 1.) b.)
on electronic commerce, including all rules deriving from both Model Laws and the EU Directive on Electronic Commerce.

By now only a few states have signed the Convention and it is possible that the problems will arise with the practical realization and implementation.

The first question is how the states will deal with the differences in their domestic laws and the standards of the Convention. Although the drafters tried to ensure compatibility of the Convention with the EU Directive on Electronic Commerce and although it is said, the provisions of the Convention are consistent with EU and U.S. e-commerce law and policy and similarities between the Model Laws and the Convention are big, the above analysis has shown that differences exist that may cause practical problems in implementation.

Furthermore it is a moot question, if more uniformity could have been achieved by more substantive rather than only facilitative rules. The problem has been discussed in detail in connection with article 13 and 14. Despite the facilitative character of the Convention, it could have been possible to create more substantive rules that would have created more uniformity, especially in context with contract formation and article 13.

However, a substantive rule on that issue bears the risk of interfering with national rules on contract formation and so to create a duality of regimes.

Another point is the scope of the Convention, which influences the goal of uniformity.

The flexibility offered to member states to alter the application through declarations made when signing the Convention may act as a barrier to harmonization and uniformity, as it creates the potential for a regime of varying and multitudinous exemptions. This could strip the Convention of the very legal certainty in international electronic contracts it is trying to create.

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202 See comments on: http://www.out-law.com/page-5893.html
204 See discussion in Chapter 2, III, 1 d.), e.)
205 Explanatory note, para. 53, 130.
It can be argued that uniformity can be achieved to a bigger extent, when the parties to the Convention extend the limited scope of application. State parties could also apply the Convention to national contracts, to avoid duality of regimes, create a greater effectiveness and prevent confusion and costs.\textsuperscript{207} Although this possibility is not mentioned in the Convention, there are no provisions in the Convention that preclude such an extension. Some commentators also promote an extension of the applicability by the states parties to consumer contracts. This is possible by excluding article 2 (1) (a) by way of a declaration under article 19 (2), or alternatively by simply extending the rules, since a state doing so, would not be in breach of any binding obligation.\textsuperscript{208} Although this possibility would doubtlessly provide more uniformity, it is in my opinion the wrong way, as consumer transactions require a higher standard of consumer protection than business-to-business commerce, e.g. when it comes to treatment of errors, availability of contract terms or determination of the time when an electronic communication is received.\textsuperscript{209}

The goals of legal certainty and predictability have also been improved by modernization of the previous legal instruments and new provisions. Especially new provisions like articles 11 and 14, but also revised rules like articles 10, 9 or 12 make a great contribution to the abovementioned goals. Nevertheless the analysis has also shown weak points, notably the vagueness of some provisions. A look at the working papers shows how difficult some discussions were and sometimes the compromise resulted in the lowest common denominator.

2.) Importance for international trade

The importance of the Convention and the influence it will have on international trade remains to be seen. As the Convention was mainly based on the CISG and both Model Laws, it might suffer from these same pitfalls and from the unfamiliarity of domestic judges with

\textsuperscript{207} Chong/Chao, ‘UN Convention’, p. 134.  
\textsuperscript{208} Chong/Chao, ‘UN Convention’, p. 135.  
\textsuperscript{209} Explanatory note, paras. 72, 73.
the principles and techniques of jurisprudence under the Convention, leading to varying domestically-oriented interpretations.210

By now no official commentary is available211, but explanatory reports and guides to enactment as provided for both Model Laws, help to promote the Convention and make it wider known and accepted.

Some members of the internet community have scathed, that they have not been consulted during the development and drafting process.212 This is regrettable, as the internet community could not only have helped in the drafting process, but also in promoting the Convention’s publicity and acceptance.

At the moment its promotion is one of the most important issues, as only the adoption by many states can influence the international trade to an important degree.

CHAPTER 3: ELECTRONIC COMMERCE UNDER THE UN CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS (CISG)

The Convention on Electronic Contracting is intended to deal exclusively with electronic commerce. Although in the future the whole spectrum of electronic commerce may be governed by the Convention, at the moment its influence is in its infant stages. The Convention so far has been signed by a few states only, which do not play a key role in the worldwide trade by electronic means.213

211 On the 01.02.2007 the secretariat issued an ‘Explanatory note’, which is frequently quoted in this dissertation. However, the note is not an official commentary.
213 With the exception of Singapore. In states like Madagascar, Central African Republic, Senegal or Sierra Leone electronic technology is not widespread and electronic business transactions are not very common.
Currently most of international (electronic) trade is governed by the CISG. It has been adopted by 70 countries\textsuperscript{214}, among them states of prime importance for the worldwide trade by electronic means.

As already mentioned, the CISG was planned and drafted not primarily for electronic communications, since at the time of its planning, technologies like the internet, email or EDI were mostly unknown.

Consequently the application of the CISG to electronic communications can lead to difficulties and controversy, which I want to discuss.\textsuperscript{215}

I. Application of the CISG to electronic communications

The first fundamental problem is the general applicability of the CISG to electronic communications.

1.) ‘Contracts of sale of goods’ in terms of article 1 (1) CISG

Comparable to the provisions of the Convention on Electronic Contracting, the CISG sets out in article 1 (1) the sphere of application. Pursuant to this provision, the CISG applies to ‘contracts of sale of goods between parties whose place of business is in different states’.

Although the CISG does not define the notion of ‘contract of sale’ ‘expressis verbis’, it can be inferred by reference to articles 30 and 53 CISG, as a contract where one party (seller) is obliged to deliver the goods, possibly to hand over any documents relating to them, and to transfer the property on the goods, whereas the other party (buyer) must pay the price and take care of the delivery of the goods in return.\textsuperscript{216}

\textsuperscript{214} The current status can be seen on (last access 01.02.2007): http://www.uncitral.org/uncitral/en/uncitral_texts/sale_goods/1980CISG_status.html
\textsuperscript{215} The focus of the dissertation lies on the Convention on Electronic Contracting, hence electronic commerce under the CISG can be discussed only on its basis features and in a general way. Where a problem could be only addressed roughly, I refer to further reading in the footnotes.
\textsuperscript{216} Herber/Czerewka, \textit{Kommentar zum CISG}, article 1, para. 3. Legal aspects, A/CN.9/WG.IV/WP.91, para. 27.
The wording and definition of article 1 (1) CISG makes clear that communications, which do not lead to a conclusion of a contract are not included in the scope of application. In that case recourse to national law is necessary.

In addition to article 1 (1), article 3 (1) CISG provides that contracts for supply of goods to be manufactured or produced are to be considered sales, unless the ordering party supplies a substantial part of the materials for such manufacturing or production. In contrast, contracts for supply and services are expressly excluded from the sphere of application (article 3 (2) CISG).

The notion ‘goods’ is also not defined in the CISG and has to be interpreted in the light of article 7 CISG.

It is indisputable that all movable tangible goods are covered by article 1 (1) CISG. To what extent intangible goods or so called ‘virtual goods’ fall within the scope of application is controversial.

Generally, where a contract of sale is concluded by electronic means, whether by email, EDI or through an internet website and tangible goods are to be delivered to the buyer, there can not be doubt about the applicability of the CISG, since the CISG does not prescribe the method of contract formation. Nevertheless, contracts concerning ‘virtual goods’, which are typical for electronic commerce, make difficulties in subsumption under article 1 (1) CISG.

a.) **Standard software**

Very popular in electronic commerce is the purchase of standard software. When asking, if this issue falls within the scope of the CISG, one must distinguish between the purchase of standard software by ‘download’ or by an ‘offline contract’.

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217 Schlechtriem, *UN-Kaufrecht*, para. 70a
218 Legal aspects, A/CN.9/WG.IV/WP.91, para. 21
219 This will be discussed in detail under the specific problem of software in Chapter 3, I, 1.) a.), b.)
220 That is a so-called ‘offline-contract’, see: Wulf, *E-commerce*, p. 22.
aa.) Purchase of standard software by ‘offline contract’ on a data medium

A contract concluded by electronic means concerning the delivery of a ‘good’ can be easily classified as a ‘contract of sale’. Nevertheless it is in dispute, whether software meets the requirement of ‘goods’ in terms of article 1 (1) CISG.

As mentioned above the term ‘goods’ is not defined in the CISG and has to be interpreted, taking into account the different wording in the six different languages of the CISG. Based on this analysis, commentators have unanimously concluded that ‘goods’ under the CISG are essentially movable and identifiable separate objects. Therefore, standard software that is embodied on a movable and tangible object like a disk or on another data medium can be considered a ‘good’ under the CISG, although the software itself is an intangible good.

bb.) Download of standard software

The case is more problematic, when the underlying intangible good (the software programme) is separated from the tangible good (data medium).

The essential difference between software on a disk and a download of software (or so called ‘electronic software’) is that ‘electronic software’ is not delivered embedded in a tangible good but is transmitted electronically.

The question is, if such a download represents a case of ‘intangible’ goods outside of the scope of article 1 (1) CISG.

The answer is not uniform and differs in diverse countries and jurisdictions. On one hand one can argue that ‘electronic software’ can not be classified as ‘goods’, since it contravenes the wording of article 1 (1) and article 2 (f),

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221 For an overview over different approaches of interpretation see: Wulf, E-commerce, p. 38-42.
222 Dietrich, ‘CISG and Computer Software’, p. 55-75
which establishes the inapplicability of the CISG to ‘intangible goods’ like electricity.\textsuperscript{225}

On the other hand, the scope of article 1 (1) can be interpreted broadly, taking into account the CISG’s goal of promoting a uniform treatment of international contracts of sale.

Under the terms of such a broad interpretation, even intangible electronic software can be classified as ‘goods’ according to article 1 (1) CISG.\textsuperscript{226} Beyond that, the argument of article 2 (f) CISG can be undermined, as the exclusion of electricity resulted from unique problems with electricity which were not present with typical international sales of goods and the provision did not intend to exclude all ‘intangible goods.’\textsuperscript{227}

Another argument in favour of the applicability to the download of standard software is that the means of transmission are irrelevant and a different treatment is not advisable, since the buyer's intent is the same, whether the software is delivered on a disk or transmitted electronically.\textsuperscript{228} Additionally a different treatment of download and offline contracts leads to coincidental results.\textsuperscript{229} This obviously contravenes the goal of uniformity.

Although the jurisdiction varies in different states\textsuperscript{230}, the arguments in favour of applicability are more convincing. It can not make a difference, if the buyer purchases software on a data medium or if he downloads it directly from a website or a server, as the content of the contract is the same. Any other conclusion violates the CISG’s aim of uniformity of international sales.\textsuperscript{231}

Therefore, from my point of view, download of standard software has to be classified as a ‘good’ in terms of article 1 (1) CISG.

\begin{flushright}
\begin{itemize}
\item \textsuperscript{225} Fakes, ‘Software’, p.559.
\item \textsuperscript{227} See e.g.: Schlechtriem, \textit{Commentary} (2005), article 2 (f), para. 37.
\item \textsuperscript{228} Endler /Daub, ‘Softwareueberlassungsvertraege’, p. 605.
\item \textsuperscript{229} Mankowski, ‘Internet’, p.203.
\item \textsuperscript{230} For an overview over different jurisprudences, see: Cox, ‘Chaos versus uniformity’, p. 3-29.
\end{itemize}
\end{flushright}
b.) Custom-made software

A further question is the classification of custom-made software or standard software that is extensively modified to fit to the purposes of the buyer. Different from the problem discussed above concerning the software’s classification as ‘goods’, the crucial question here is, if such a contract is to be considered as a contract of sale or rather as a contract for work and services.

There are commentators that consider the download of custom-made software as a contract of sale in terms of the CISG\textsuperscript{232}. They argue that article 3 (1) CISG does not distinguish between standard and custom-made goods therefore no such distinction can be drawn for software.\textsuperscript{233}

However, the prevailing view is that if the whole performance or its ‘preponderant part’ is the supply of ‘services’ and not ‘goods’, the contract as a whole must be classified as a contract for work and services. For those contracts article 3 (2) CISG\textsuperscript{234} establishes the non-application of the CISG.

In contrast, minor alterations to pre-written standard programs constitute a sales contract, since the component of ‘supplying goods’ prevails.\textsuperscript{235}

This view is based upon the explicit wording of article 3 (2) CISG, which must apply likewise to electronic commerce.

This view also corresponds with the EU law\textsuperscript{236}, which defines a service as ‘any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services.’

Nevertheless this classification of contracts can lead to great difficulties and diversity in practice, as it is not always easy to determine, what the ‘preponderant

\textsuperscript{232} Dietrich, ‘CISG and Computer Software’, p. 63. But every single case has to be considered autonomously. A decision in favour of applying the CISG see also: BGH, 4 December 1996 (8 ZR 306/95)

\textsuperscript{233} Schlechtriem, \textit{UN-Kaufrecht}, para. 32. Schlechtriem favoured such a distinction in the previous, 2\textsuperscript{nd} edition of \textit{UN-Kaufrecht}.

\textsuperscript{234} Article 3 (2): ‘This Convention does not apply to contracts in which the preponderant part of the obligation of the party who furnishes the goods consists in the supply of labour and other services.’

\textsuperscript{235} Wulf, \textit{E-commerce}, p. 54. Fakes, ‘Software’, p. 582, 583

part’ of the contract is. Furthermore it can be criticised that such a distinction can be random and lead to inconsistent results.237

However, in my opinion, the goal of uniformity must find its limit at an opposing explicit wording of a provision. Therefore custom-made software or software extremely modified for the individual purposes of the buyer must be excluded from the sphere of application of the CISG.238

c.) Software licence agreements

Besides agreements, where the software is ‘sold’, either in an ‘offline contract’ or a download, there are also agreements where the software is licensed, where a software vendor grants a license to make certain use of the software.239 It is characteristic for these contracts that the ‘purchaser’ only gets a temporary right of use and the licensor still has control over the use of the product.240 These license contracts can not be classified as ‘contracts of sale’ in terms of the CISG.241

d.) Online databases

A related problem arises with the use of online databases. The question is, if research in online databases against payment can be categorized as a ‘contract of sale’ in terms of article 1 (1) CISG or rather as a contract for work and services under article 3 (2) CISG.

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237 Schlechtriem, UN-Kaufrecht, p. 32.
238 Legal aspects, A/CN.9/WG.IV/WP.91, para. 25.
239 Cox, ‘Chaos versus uniformity’, p. 17.
240 Schlechtriem, UN-Kaufrecht, p. 27, para. 32b.
241 Dietrich, ‘CISG and Computer Software’, p. 74. Schlechtriem favours nevertheless the application of the provisions of the CISG, see: UN-Kaufrecht, p. 27, para. 32b.
On one side, it can be argued that research against payment meets the requirements of article 1 (1), since the transfer of assets against payment is a typical ‘contract of sale’.\textsuperscript{242}

On the other side the research can be classified as a provision of information not intended to be stored and consequently classified as ‘rendering a service’ rather than ‘delivering a good’.\textsuperscript{243} Although the second view contravenes the aim of uniformity by a different treatment of databases than download of standard software, it is the more convincible one. The preponderant part of such a research is providing and not the delivery of information, since the payment is effected for the disposal and not for the storage or download.\textsuperscript{244} The contract’s character and the non-ambiguous wording of article 3 (2) can not be overridden.

Therefore research on online databanks must be treated as a contract for work and labour outside the sphere of the CISG.

e.) Conclusion

This short overview shows the difficulties in applying the CISG to special forms of electronic commerce. Although the goal of uniformity should always be borne in mind (see article 7 (1) CISG), the flexibility of the provisions has limits. Moreover different views in literature and diverse jurisdictions aggravate a unitary treatment.

The CISG complicates its application to diverse forms of electronic commerce through its limited wording to ‘contracts of sale of goods’ and the exclusion of other types of contracts, like the contracts for work and services. These difficulties do not occur under the Convention on Electronic Contracting due to its very broad scope of application.\textsuperscript{245}

\textsuperscript{242} Schmitz, ‘Datentransfer via Internet’, p. 256.
\textsuperscript{243} Mankowski, ‘Internet und besondere Aspekte’, p.581, 586
\textsuperscript{244} Cichon, Internetverträge, p. 183, 304.
\textsuperscript{245} See details in Chapter 2, II. 1.)
2.) Place of business in different states

Like the Convention on Electronic Contracting, the CISG applies to apparently international contracts only (article 1 (1), (2) CISG). Unfortunately it does not provide guidance, like article 6 of the Convention does, how to determine the ‘place of business’ in electronic commerce.

Merely if a party has more than one place of business, article 10 (a) establishes the place of business as the ‘place with the closest relationship to the contract’. In case of an absence of a place of business, reference is to be made to the person’s habitual residence (article 10 (b)). These provisions conform to article 6 (2) and (3) of the Convention on Electronic Contracting.

Although there is no definition of the place of business in the CISG246, it can be specified as the place where a stable business organization or where the centre of the business activity directed to the participation in commerce is located.247

The challenges to determine the parties’ place of business in electronic commerce have already been discussed at great length.248

As the CISG lacks a rebuttable rule comparable to article 6 (1), (4) and (5) Electronic Contracting Convention, the question is, which circumstances are to be taken into account for a determination.

It is widely accepted that objective criteria are considered. It is agreed to take into account incorporated terms of contract or standard terms and conditions as long as they give information about the parties’ nationality249, whereas the contract’s language and the currency of payment do not compulsorily provide a clear indication. Although the CISG does not contain an express regulation on it, location of the equipment and technology supporting an information system, as well as email address and top-level-domain are not adequate circumstances to be

246 Also the Convention on Electronic Contracting does not provide a definition, see: Chapter 2, II, 1.) c.)
248 See: Chapter 2, II, 1.) c.)
taken into account, since they do not offer a reliable link to the ‘place of business’.

It is also disputable, whether subjective criteria, like the parties’ indication, allow to draw a conclusion on the location of the place of business, as set forth by article 6 (1) of the Electronic Contracting Convention.

The prevailing view in German literature rejects the consideration of the parties’ indication. It is argued that legal certainty can be achieved solely by objective criteria, since the risk of parties’ incorrect indication, whether intentional, negligent or innocent is far too big and uncontrollable.

In my opinion, this argument can be applied to traditional paper based contracts, as those contracts have sufficient objective factors, like written contracts, note papers, written addresses and contact numbers, to take into account.

In electronic contracts, where no face-to-face confrontation takes place and sometimes no objective criteria exists, it must be possible and appropriate to consider the parties’ indication. The abovementioned risk of misuse can never be entirely excluded where the parties are granted autonomy.

Also the Working Group does not question the consideration of the parties’ indication to determine the place of business, both within article 1 (1) and within article 10 CISG.

The analysed controversial issues show how difficult and diverse it is to determine the CISG’s sphere of application for electronic contracts.

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250 Schlechtriem, *UN-Kaufrecht*, para. 70.
251 See Chapter 2, II, 1.) c.)
253 This problem has also been discussed in connection with article 6 (1) of the Electronic Contracting Convention, see: Chapter 2, II, 1.) c.), aa.)
255 Legal aspects, A/CN.9/WG.IV/WP.91, para. 9.
256 Comparable to the provision in the Electronic Contracting Convention the CISG provides in article 2 diverse exclusions of the scope of application and the possibility of declarations on the scope by the states parties (see e.g. articles 92 -97 CISG). Since these regulations do not bear any special problems inherent for electronic communication, they will not be elaborated.
II. Electronic contracts under the CISG

Electronic contracts are not addressed by the CISG, nevertheless diverse questions of treatment, form requirements and contract formation can be answered by interpretation of the existing provisions or by way of filling gaps (article 7 CISG).

1.) Treatment of electronic contracts

a.) Validity of electronic contracts

The CISG does not contain a provision on legal recognition of electronic commerce equivalent to article 8 of the Convention on Electronic Contracting. It rather excludes questions of validity in article 4 sentence 2 CISG, unless it concerns contract formation, the parties’ contractual obligations or any other issue expressly regulated by the CISG.

Although article 4, sentence 1 CISG refers by its explicit wording merely to contract formation and the parties’ contractual obligations, the reference is not complete and exhaustive. In terms of a broad interpretation it is agreed, that article 4, sentence 1 alludes to all matters covered by the CISG.257

Consequently, if a contract meets the requirements of formation and form as set out in the CISG258, it is valid, irrespective of its nature as electronic contract or traditional contract259. Contrary thereto, other questions of validity are governed by national law.

b.) Treatment of websites

The treatment of websites under the CISG poses a further problem.

257 Staudinger/Magnus, Kommentar, article 4, para. 4. Schlechtriem, Kommentar (2000), article 4, paras. 3, 4.
258 Article 11 CISG does not impose any form requirements, unless the contracting state does a declaration under article 96 CISG. This applies generally also for electronic contracts. The requirements of form will be discussed later in detail.
259 Schlechtriem, Kommentar (2000), article 11, para. 2.
The CISG lacks an unambiguous provision, comparable to article 11 of the Convention on Electronic Contracting, concerning the legal treatment of websites, either as binding offers or as invitations to make offers.

However article 14 (1) CISG clearly defines an offer as ‘a proposal to one or more specific persons, which is sufficiently defined and indicates the intention of the offeror to be bound’, whereas an invitation to make offers is assumed in article 14 (2), where ‘a proposal is directed other than to one or more specific persons, unless the contrary is clearly indicated by the proposing person.’

Both provisions, article 14 CISG and article 11 of the Convention, are comparable in structure and purpose, since both refer to the specification of the addressees.

Consequently, there can be no doubt that websites, which address their products to an unlimited number of internet users, will also be considered under article 14 (2) CISG as ‘invitations to make offers’, since there can be no legal difference between such a website and traditional paper based catalogues, brochures or newspaper advertisements that are undisputedly covered by article 14 (2) CISG.

Internet auctions and other similar transactions, like digitalized downloads of software, can by contrast be categorized as binding offers without any difficulty, since the offeror clearly indicates his intention to be bound. The same arguments elaborated in connection with article 11 Convention on Electronic Contracting apply here.

Also the problem of log-in websites and the unfamiliarity of some legal systems with ‘invitation to make offers’ resembles those discussed under article 11 of the Convention.

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260 See e.g.: Schlechtriem, Kommentar (2000), article 14, para. 13. Enderlein/Maskow/Stargardt, Konvention, article 14, para. 3. Staudinger/Magnus, Kommentar, article 14, para. 37. Legal aspects, A/CN.9/WG.IV/WP.91, para. 47.

261 Marly, Softwareuberlassungsvertraege, para. 232.

262 Wulf, E-commerce, p. 95.

263 For all details see: Chapter 2, III, 1.) b.)

264 This issue and the approach how to solve the problem have been discussed in Chapter 2, III, 1.) b.)
This brief comparison shows that treatment of websites under the Electronic Contract Convention and the CISG, despite its lack of an adequate provision, leads to the same results.

c.) **Automated data systems**

A related matter is how to classify automated message systems under the CISG. The crucial question is if a ‘response’ by an automated data system can be categorized as an acceptance of offer in terms of article 18 (1) CISG.

According to that provision acceptance is a ‘statement or other conduct whereby the offeree indicates assent to an offer.’ A valid acceptance generally requires a human will and a human interaction, which seemingly is missing in the automated data systems.

Though there are few isolated views that automated data systems lack of will and their declaration can not be attributed to anyone, this is, in my opinion, antiquated and leads to untenable results.

As already elaborated above, the person on whose behalf a computer was programmed has the will to be bound to any message generated by the automated system and wants to be responsible for it. The person expresses his or her will by the aid of the system and the person’s human will remains, so that the message generated by the system can be attributed to the person behind it.

Consequently the message generated by an automated data system can be classified as an acceptance in terms of article 18 (1) CISG.

This construction applies also, in my opinion, to automated data systems on both sides of the contract, since the above mentioned principles can be used for the definition of an ‘offer’ as well.

Therefore a contract can even be validly formed under the CISG by an automated data system, without any human interaction and review on both sides.

266 See: Chapter 2, III, 1.) c.)
267 Ferrari, ’Brief Remarks on Electronic Contracting’, p.29
This interpretation is affirmed by article 6 CISG, which expressly allows the parties to create their own rules, and article 9 (1) CISG that binds the parties to any usage they have agreed to.  

Despite a few difficulties in interpretation, the treatment of automated data systems under the CISG does not differ from the approach provided by the Convention on Electronic Contracting.

d.) Errors in electronic contracts

Article 4 (a) CISG expressly provides the exclusion of validity questions from the sphere of application. Therefore treatment of errors, whether in traditional contracts or in electronic interaction with automated data systems is reserved to national law, as long as the error does not concern form requirements, objective consensus, or any other matters explicitly regulated in the provisions of the CISG.

An ‘input error’ in terms of article 12 of the Electronic Contracting Convention falls outside the CISG’s scope of application, since this issue is not concerned with matters addressed by the CISG. Hence, the appraisal of an ‘input error’ is reserved to the national law. This applies also to errors regarding the content of declaration of will and for errors due to malicious fraud.

Nevertheless, errors concerning characteristic quality of goods, the parties’ financial ability and faulty transmission are governed by the CISG, since these issues are explicitly regulated in the CISG. This applies both to errors in traditional paper based contracts and to errors made in electronic contracts.

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270 Staudinger/Magnus, *Kommentar*, article 4, para. 4. Schlechtriem, *Kommentar* (2000), article 4, para. 3, 4. This issue has been also discussed in Chapter 3, II. 1.) a.)
272 In case of inconsistence with the required quality, quantity and description, the buyer has the rights stipulated in article 45. In the case of financial ability, article 71 applies and in case of faulty transmission article 27 regulates the matter.
This overview clearly shows that the treatment of errors in electronic contracts differs significantly under the CISG and the Convention. While the latter contains a special rule for input errors in electronic communications exchanged with automated data systems, this matter falls pursuant to the CISG under the national law.

To the contrary, the CISG deals with diverse errors, irrespective whether in traditional or electronic contracts, since it contains substantive rules on contract formation, transmission errors or the parties’ contractual obligations and abilities, which the Convention does not address and therefore leaves to national law.

e.) Contract terms

As already mentioned, article 14 and 18 CISG provide a definition of offer and acceptance. Furthermore article 19 states that a reply to an offer which purports to be an acceptance but contains alteration constitutes a rejection of the offer and a new counter-offer.

Consequently, despite the lack of an expressed rule on contract terms in the CISG, these provisions provide a necessary regulatory framework for cases of insufficient definition of the proposal and of subsequent alteration to the terms of the proposal. This can also be directed towards electronic contracts.

However the CISG is silent as to the availability of contract terms and terms and conditions in a particular manner.273

Despite the lack of an expressed rule, the question of a valid incorporation of terms and conditions can be solved under the above mentioned provisions of the CISG by applying article 8 CISG.274

Terms and conditions that are not included are thus only validly incorporated, when the reference is so clear that a reasonable person ‘in the shoes of the recipient’ would comprehend it. Moreover the addressee must also be in the position to appreciate the content of those terms and conditions, because a

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‘reasonable person of the same kind’ as the offeree must have understood the statement ‘in the same circumstances and thus must at least have had an opportunity to become aware of and understand the context, the language in which the reference to the terms and conditions is made.\textsuperscript{275}

The validity of terms and conditions is in turn, pursuant to article 4 (a) CISG, a question of domestic law.\textsuperscript{276}

The problem of ‘battle of forms’, either in traditional or in electronic communications, is not expressly regulated, nevertheless by means of interpretation and determination of the parties’ intent according to article 8, the issue can be solved under the CISG’s provisions.

Where the discrepancy in the particular terms and conditions is insignificant and not material, article 19 (2) CISG applies, so the latter terms and conditions become effective for the contract, unless the offeror objects to the discrepancy.

Where the discrepancy is in contrast material and significant, a contract is not formed between the parties’ due to a lack of their consent (see article 19 (3) CISG).\textsuperscript{277}

As the short comparison shows, the CISG addresses more substantive matters in connection with contractual terms than the Convention on Electronic Contracting. Although the issues of availability of contractual terms and the validity of terms and conditions must be solved under national law, the essential requirements are set out in articles 14 and 19 CISG, which apply to the incorporation of terms and conditions as well. Also the problem of ‘battle of forms’ can be solved by application of article 19 (2) and (3) CISG.

As a matter of course, all these principles apply to electronic contracts as well. Due to a larger amount of substantive rules and the possibility of their application by interpretation in terms of article 8 CISG in case of regulatory gaps, the questions concerning contractual terms in electronic contracts can lead under the

\textsuperscript{275} Schlechtriem, \textit{Commentary} (2005), article 14, para. 16. Staudinger/Magnus, \textit{Kommentar}, article 14, para. 41.

\textsuperscript{276} Schlechtriem, \textit{Kommentar} (2000), article 4, para. 20.

\textsuperscript{277} Van der Velden, ‘Battle of forms’, p.223. Schlechtriem, \textit{Kommentar} (2000), article 8, para. 11.
CISG to different results than under the Convention on Electronic Contracting, which addresses the whole spectrum of these issues to national law.278

2.) Form requirements

The next question is, under which circumstances electronic contracts meet diverse formal requirements and are formally and validly concluded in terms of the CISG.

a.) Freedom of form: Article 11 CISG

As already stated above, the CISG deals expressly with the formal validity of contracts. Article 11 establishes that ‘a contract for the international sales of goods doesn’t need to be concluded in or evidenced by writing and is not subject to any other requirement as to form. It may be proven by any means, including witnesses’. Hence, article 11 grants complete freedom of form for contract formation.

This principle of freedom of form applies also to electronic contracts.279

Notwithstanding the principle of freedom of form, the parties are pursuant to article 6 CISG free to deviate from that principle by excluding the application of article 11 CISG. Especially in international contracts parties often agree upon the requirement of writing or personal signature.

Furthermore states parties to the CISG are allowed to make declarations under articles 96 and 12 CISG, to exclude any provision of articles 11 and 29 or Part II of the CISG, which ‘allows a contract of sale or its modification or termination by agreement or any offer, acceptance or other indication of intention to be made in any form other than writing.’280

278 Especially referring to the issue of ‘battle of forms’ the CISG sets a stricter standard than for example the domestic law in Germany. See: Schlechtriem, *Kommentar* (2000), articles 14 – 24, para. 9.
280 The difficulties of a declaration under articles 96 and 12 CISG and its range, especially its impact on article 13 CISG, will be discussed later in Chapter 3, II. 2.) c.)
Even the CISG itself contains a few provisions establishing the condition of written declarations.\(^{281}\)

Consequently, despite a general freedom of form, contracts or declarations may need to meet formal requirements under the CISG. Particularly electronic contracts can cause difficulties in meeting these requirements.

b.) Requirement of writing

Regarding electronic contracts the crucial question is, when they constitute ‘writing’. Whereas article 11 establishes the freedom of form, article 13 CISG is the relevant provision for interpretation of ‘writing’. According to this article, ‘for the purposes of this Convention ‘writing’ includes telegram and telex’. It is nowadays recognized that article 13 applies by analogy to telefax communications as well, on the grounds that it merely constitutes a technical development of a telex.\(^{282}\)

If beyond that, electronic communications, such as email, EDI or websites constitute ‘writing’ this is arguable and has to be interpreted in terms of article 7 CISG.

It can be argued that electronic communications can generally never meet the requirement of writing as long as they have not been printed out and appear only on the recipient’s screen or are only retrievable.\(^{283}\)

This view is in my opinion antiquated and does not cope with the technical developments and the increased use of electronic communication. It seems to be out of touch with reality, to demand the recipient to print out all electronic communications that are stored in his computer to meet the requirement of writing in terms of the CISG.

Furthermore the fact that the CISG promotes a general freedom of form allows for an extensive interpretation of article 13 CISG.

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\(^{281}\) See: e.g. article 21 (2) or article 29 (2) CISG.


\(^{283}\) Schlechtriem, *Kommentar* (2000), vor article 13, para. 2. But Schlechtriem has changed his view as can be seen in *Commentary* (2005), article 13, para. 2a.. Witz/Salger/Lorenz, *Internationales Kaufrecht*, article 13, p. 124.
However it is questionable if all electronic communications can be treated equally and when it is necessary to distinguish different forms of electronic communications.

aa.) Electronic communications stored and retrievable by the addressee

With regard to what has been said above, electronic communications that are stored and retrievable by the addressee have to be considered as being ‘in writing’. In my view, such an electronic communication fulfils all the functions a traditional paper document does. Generally the requirement of writing is for the purpose of information, for the authenticity of the declaring person and for the evidence of declarations. An electronic document that is stored, retrievable and can be printed out anytime to manifest the electronic declaration, and can thereby be safely read and understood, and, if necessary, used to show evidence, fulfils the functions of ‘retrieving and perceiving.’ Therefore, no different treatment than that of a written declarations is justifiable.

This principle applies for electronic communications stored on non-rewritable data mediums (e.g. CD-Rom, DVD) as well as on rewritable data mediums (Disk, Hard Disk, ZIP-Disk). A rewritable medium bears the risk of being subsequently altered and manipulated and may endanger to fulfil the condition of producing evidence. However, this risk emerges also in connection with telefax, which can also be easily subsequently fudged. As telefax is unanimously subsumed under article 13 CISG, the drafters seem to have recognised this risk and considered it as being not the decisive factor for this provision.

284 Palandt, Kommentar, § 125, para. 1.
286 Wulf, E-commerce, p. 140, 141.
287 Abel, ‘Urkundenbeweis’, p. 644, 646.
288 See: Chapter 3, II, 2.) b.)
Furthermore manipulations on electronic communications on rewritable mediums can be easily avoided and diagnosed by electronic counter measures and security systems.289

Eventually, such a broad interpretation of article 13 CISG is advisable and appropriate in the light of the CISG’s principle of freedom of form.

bb.) Electronic communications not stored by the addressee

Another question is whether electronic communications that are solely displayed on the receiver’s monitor screen and are not stored durably by him290 can constitute ‘writing’.

Some German Courts ruled that a website complies with the above mentioned functional requirements since the website provides information the user can revert to anytime.291

This interpretation goes too far in my opinion, as the term ‘writing’ requires a durable possibility of being retrieved and perceived. In contrast to this, the website operator can alter the website anytime without the addressee’s knowledge. Therefore the mere display on the screen lacks this possibility of a stable revert to the information. Only where the user downloads the information or stores it on a data medium and can revert to it, the condition of ‘writing’ can be fulfilled.292

Consequently the mere display of a website can not be classified as ‘writing’, despite the principle of a broad interpretation of article 13 CISG.

289 Most of the programs automatically furnish the document with a date of the last processing. Therefore the addressee can easily diagnose if any subsequent manipulations or alternations have been made on the electronic document.
290 This is e.g. a website that is displayed at the user’s monitor but that can not be stored by the user.
The court decisions were rendered in connection with the EU Distance Selling Directive 17.02.1997 that had been implemented in the German Distance Selling Act (FernsAbsG). With the reformation of the BGB, the provision of the FernsAbsG have been incorporated in the BGB.
Generally, electronic communications meet the requirement of ‘writing’ under the same conditions in the CISG and the Convention on Electronic Contracting. Although article 13 CISG has not been designed for electronic commerce, its interpretation leads to comparable results as article 9 (2) of the Convention.

The controversial treatment of the mere display of websites, whereby the information had not been stored by the user, exists both under CISG and the Convention.293

c.) Declaration under articles 96, 12 CISG

As described above, the majority of electronic documents can be classified as being in ‘writing’ pursuant to article 13 CISG, except the mere display of websites.

Nevertheless, there remain divergent views regarding the effect of a state’s declaration pursuant to articles 96 and 12 CISG on article 13 CISG.294

On the one hand, it can be argued that such a declaration does not concern article 13, since a reservation can only be made to article 11 and not directly to article 13.295 Neither article 12 nor article 96 contains a cross reference to article 13.296 Thus, even where a declaration under articles 96 and 12 has been made, the form requirements depend solely on article 13 CISG and not on the national law.

On the other hand, article 13 can be considered as an interpretative provision dependent to article 11, which applies only to those instances where the Convention itself refers to a ‘writing’ requirement.

293 See Chapter 2, III, 2.) b.)
294 By now (last access on the UNCITRAL website: 01.02.2007) Argentina, Belarus, Chile, Estland, Hungary, Ukraine, Russian Federation, Paraguay, Lithuania, Latvia have declared, in accordance with articles 12 and 96 of the Convention, that any provision of article 11, article 29 or Part II of the Convention that allowed a contract of sale or its modification or termination by agreement or any offer, acceptance or other indication of intention to be made in any form other than in writing, would not apply where any party had his place of business in its territory. http://www.uncitral.org/uncitral/en/uncitral_texts/sale_goods/1980CISG_status.html
295 See the express wording of articles 96 and 12 CISG.
296 Staudinger/Magnus, Kommentar, article 13, para. 8. Schlechtriem, Kommentar (2000), vor article 13, para. 4.
According to that view, after a declaration, the question of ‘writing’ can be answered by applying the standards in domestic law only.\(^\text{297}\)

However, the latter opinion contravenes not only the wording of the relevant provisions but also the CISG’s goal of a uniform treatment of international contracts and the drafters’ intention.\(^\text{298}\) Furthermore the will of the contracting parties remain out of consideration.

Therefore from my point of view, a state’s declaration in terms of articles 96 and 12 CISG does not affect the treatment of electronic documents according to the standards set out in article 13 CISG.\(^\text{299}\)

d.) Requirement of signature

The CISG does not contain any provision on requirements of signature. It does not require signature in any event and no state is entitled to make exceptions thereof, as articles 96 and 12 apply only to the legal formality of writing.\(^\text{300}\)

Hence, the requirement of electronic signature can only be relevant, where the parties agree on such an authentication within their contractual freedom (article 6 CISG). The problem whether electronic signatures meet the agreed requirement of ‘signature’ can therefore only be solved by interpretation of the parties’ intent in terms of article 8 CISG.

The crucial question is, whether the parties wanted to permit the use of electronic signatures, when they agreed upon the requirement of individual signatures.

In my opinion, a decision depends on the particular circumstances and can vary from case to case. Therefore no universally valid answer can be given.\(^\text{301}\)

This approach and the standards are different in the Electronic Contracting Convention (article 9 (3)), since the CISG itself does not know the requirement of


\(^{298}\) Legal aspects, A/CN.9/WG.IV/WP.95, para. 123.

\(^{299}\) Ferrari, 'Brief Remarks on Electronic Contracting', p.298.

\(^{300}\) Eiselen, ‘CISG’, p.35.

\(^{301}\) For an overview over court decision in Germany and the view in German literature, if and when electronic signatures fulfil the requirement of ‘signature’ see: Wulf, *E-commerce*, p. 150, 151. The overview refers however to German law and can not be transferred to the question under the CISG.
signature and it becomes relevant only in case of the parties’ dissenting agreement. The Convention by contrast, refers to signature requirements ‘by law’.

e.) Requirement of originality

The CISG is also silent as to the requirement of ‘originality’ and does not contain a provision adequate to article 9 (4) (5) of the Convention on Electronic Contracting. The principles elaborated in connection with the requirement of ‘signature’ therefore also apply to the requirement of ‘originality’.

3.) Contract formation; Time and place of contracting

a.) Formation of contracts

As already mentioned, the CISG contains expressed rules, on time and conditions of contract formation. Pursuant to article 23 CISG a contract is concluded the moment when ‘an acceptance of an offer becomes effective in accordance with the provisions of the CISG.’

So, a contract requires an effective offer and an effective acceptance thereof.302 Both offer and acceptance become effective upon their receipt at the other party (article 15 (1), 18 (2) CISG).

Accordingly, the CISG has adopted the ‘reception’ theory, when it comes to contract formation.303 This also applies for electronic contracts that are concluded non-instantaneously.304

302 As already discussed in Chapter 2, III, 3.), the offer must be specified according to article 14 (1) CISG to be effective. When an offer is specified has been discussed also in connection with the treatment of websites, see Chapter 3, II, 1.) b.). Otherwise there are no further problems intrinsic to electronic form of communication than to other forms of communication, so the condition of ‘sufficiently defined’ will not be discussed here in detail.

303 For other declarations of will the ‘dispatch theory’ is applicable. This will be discussed in Chapter 3, II, 3.) b.)

304 Legal aspects, A/CN.9/WG.IV/WP.91, para. 40. Eiselen, ‘CISG’, p.29. Concerning the question, when electronic communications are non-instantaneous, see Chapter 3, II, 3.) c.)
b.) Time of dispatch of electronic communications

First of all, it is important to determine the time of the dispatch of a communication, since a receipt requires a previous dispatch.

This determination is, beyond that, relevant for article 16 (1) CISG, which provides that ‘an offer may be revoked, if the revocation reaches the offeree before he has dispatched an acceptance’.

Furthermore, article 27 CISG contains the general rule\textsuperscript{305} of the ‘dispatch theory’. It provides that despite an ‘error, delay or failure of the communication to arrive, the addressee is not deprived of his right to rely on that communication’, with other words: The recipient bears the risk of the communication’s loss. Therefore it is agreed, that all communications, unless the CISG provides otherwise (as it does for contract formation), become effective with their dispatch.\textsuperscript{306}

Whereas it appears obvious when a traditional paper based communication is sent, the determination is more difficult with electronic communications. On one hand the dispatch of electronic communications can be assumed, when the communication has left the internal network and the dispatch has been signalled by a dispatch terminal.\textsuperscript{307} This approach would be consistent with article 10 (1) of the Electronic Contracting Convention that also defines the time of dispatch as the time when the communication leaves the system.

Nevertheless the Working Group proposes and promotes to apply article 15 (1) Model Law on Electronic Commerce to determine the time of dispatch of electronic communications under the CISG.\textsuperscript{308} Article 15 Model Law refers to the time of dispatch as ‘the time when the communication enters the information system outside the control of the originator.’

\textsuperscript{305} Although article 27 refers directly to Part III of the CISG only, it is recognised, that it is a general rule, which applies for the other parts of the CISG as well. For more detail see e.g. Magnus, ’UN-Sales Law’, part 5 (19).

\textsuperscript{306} Schlechtriem, \textit{Commentary} (1998), article 27, para. 1.

\textsuperscript{307} Schlechtriem, \textit{Commentary} (1998), article 27, para. 7.

\textsuperscript{308} Legal aspects, A/CN.9/WG.IV/WP.91, para. 52.
The majority of commentators subscribe to this view\textsuperscript{309}, with the arguments of legal certainty and the allocation of risks. Despite various opposing arguments,\textsuperscript{310} the latter view is the prevailing one.

The distinction is more of a theoretical nature, as normally there are only split seconds in-between leaving the originator’s system and entering the addressee’s system. However, in particular cases, the determination of the time of dispatch of electronic communications under the Convention can lead to different results as under the CISG.

c.) Time of receipt of electronic communications

For the question of contract formation by electronic means it is crucial to establish the time of receipt of electronic communications.

Article 24 defines that ‘for the purpose of this Part of the Convention, an offer, declaration of acceptance or any other indication of intention reaches the addressee when it is orally made to him or delivered by any other means to him personally, to his place of business or mailing address.’

The problem is, if and how to apply article 24 CISG to electronic communications.

It is agreed that, although article 24 was not drafted for electronic communications, it applies to them by interpretation according to article 7 CISG.\textsuperscript{311}

\textbf{aa.) Oral communications}

As the above definition shows, article 24 distinguishes between declarations made orally or those made by other means.

An oral communication reaches the addressee, when it is heard by him.

\textsuperscript{310} See: Chapter 2, III, 3.) b.)
\textsuperscript{311} Schlechtriem, Commentary (2005), article 24, para. 2. Eiselen, ‘CISG’, p.28.
The question is, if there are any electronic communications, which can be considered ‘orally’.
Electronic communications provide various possibilities of transmission of declarations.
There is ‘direct’ transmission, like the exchange of communications online, transmission per email, where the message is stored in an email box, or transmission via EDI. None of these communication methods can be classified or interpreted as ‘oral’, as this would contravene the explicit wording of article 24 CISG.312 The above mentioned methods are therefore to be considered as ‘other means’.

Nevertheless there are new developments on the electronic market, which have to be taken into account.
Nowadays it is common to make phone calls and videoconferences via internet. This is made possible by simply downloading the right software.313
As it is recognised that declarations made by telephone are ‘oral’ in terms of article 24 CISG314, the same must apply for the above mentioned new methods, since merely the different method of telephone calls does not justify a different legal treatment.

bb.) Communications made by ‘other means’

All other electronic communications, like email, EDI or online communications must be categorised as ‘other means’ in terms of article 24 CISG.
They ‘reach’ the addressee when they ‘are delivered to him personally or to a physical address.’ The ‘location’ of an e-mail has to therefore be understood in a functional rather than a physical way.315
This condition is generally fulfilled in electronic communications, when the communications enter the addressee’s server. The email box has to be treated

312 Wulf, E-commerce, p. 113.
313 See eg.: ‘skype’ or ‘buddyphone’
314 Schlechtriem, Commentary (2005), article 24, para. 4.
315 Hahnkampe, ‘Electronic communications’, p.150
thereby as a traditional letter box.\textsuperscript{316} The recipient’s awareness of the delivery is basically not necessary. It even is irrelevant, when the addressee is not able to read the communication due to technical problems, since it is within the addressee’s ‘sphere of influence’ to provide for adequate means to ensure that his internal communication functions satisfactorily.\textsuperscript{317}

However it has been discussed, whether the recipient should have the opportunity for awareness of delivery, as especially in electronic communications there is an imminent risk of not taking notice of the communication’s delivery.

A few isolated commentators reject the condition of opportunity of awareness due to the contrary wording of article 24 CISG that refers, in their opinion, to objective requirements only.\textsuperscript{318} This opinion seems questionable, as the addressee would be burdened with the obligation and the risk to check his email box even outside of his business hours or during holidays. Furthermore potential abuse by the addressor would go to the addressee’s account.

Therefore it is fair, with respect to the allocation of risks, to require the addressee’s opportunity for awareness of the delivered communication.\textsuperscript{319} Generally, an abstract opportunity suffices to fulfil the requirement, unless the communication is delivered outside of business hours.\textsuperscript{320}

Moreover, especially in email communications, there is an imminent risk, the communications are sent to a non-designated address. This problem has been solved by the Convention on Electronic Contracting by article 10 (2), but the CISG is silent, how to tackle this question.

\textsuperscript{316} Wulf, \textit{E-commerce}, p. 117.
\textsuperscript{320} Wulf, \textit{E-commerce}, p. 125.
However, it is agreed that abuse by the addressee may not go to the addressee’s account. Hence it is required, that the recipient can expect to receive a communication at a particular address\(^{321}\), provided that the addressee expressly or impliedly has consented to receive electronic communications of that type, in that format and to that address.\(^{322}\)

**cc.) Prevention from receipt of electronic communications**

It is moreover also not regulated, how to treat the recipient’s attempts to delay or prevent the communication from reaching him. It is thinkable to interpret article 24 in the light of good faith (article 7 (1)),\(^{323}\) so that at least, where the recipient acts fraudulently, the communication is deemed to have reached him at the moment when it would have done so, if had he not prevented that event.\(^{324}\)

More problematic is, when the addressee’s prevention is merely negligent. This happens often with electronic mails, when the addressee forgets to empty his email box and the email is returned unread to sender due to the overloading.

A definite answer depends on the circumstances of the particular case and the usage the parties agreed to (article 9 CISG) and must be decided in each individual case. However, if the addressee negligently omits to empty his email box, although he knows about the entry of the email or positively knows about the overloading and nonetheless omits to empty the email box, the communication may be deemed to have reached him.\(^{325}\)

This problem does not occur under the Convention to that extent, as the Convention refers to the addressee being ‘capable’ to retrieve the communication.

In the end both legal documents come to the same finding in practice.

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\(^{321}\) Eiselen, ‘CISG’, p.28.
\(^{325}\) Wulf, *E-commerce*, p. 128.
dd.) Allocation of risks; Burden of proof

Generally, each party bears the risk of its own sphere of control. The rules on the burden of proof must be developed from the CISG rules.\textsuperscript{326} As a matter of principle it can be said, that the party who claims that his declaration has reached the other party (that will be regularly the addressee) bears the burden of proving his claim. It is for the addressee to prove impediments which may ‘exempt’ him.\textsuperscript{327}

As the short overview over the receipt of communications shows, article 24 CISG applies to electronic communications as well. By way of interpretation, the treatment of the time of dispatch and receipt of electronic communications does not differ significantly from the provision of article 10 of the Electronic Contracting Convention.

d.) Place of dispatch and receipt of electronic communications

The place of dispatch is the addressee’s place of business, whereas the place of receipt is the addressor’s place of business or mailing address, or in case of an absence of a place of business, the habitual address.\textsuperscript{328}

In consequence, the treatment of the place under the CISG resembles that under the Convention and does not lead to different results in practise.

\textsuperscript{326} Herber/Czerewka, \textit{Kommentar zum CISG}, article 24, para. 7. Schlechtriem, \textit{Commentary} (2005), article 24, para. 18.
\textsuperscript{327} Schlechtriem, \textit{Commentary} (2005), article 24, para. 18.
\textsuperscript{328} The question how to determine the place of business in electronic commerce under the CISG has been discussed in detail under Chapter 3, 1, 2.).
4.) Performance by electronic means

Besides provisions on contract formation the CISG contains regulations concerning contract performance, in contrast to the Convention on Electronic Contracting.

In brief, performance (article 28 CISG) takes place, when the seller delivers the agreed goods, hands over any relating documents and transfers the property on the goods to the buyer (article 30 CISG) and the buyer pays the price and takes delivery (article 53 CISG).

The question is, whether these provisions cause problems when it comes to performance by electronic means.329

a.) Online performance of the seller’s obligations

With the increase in diversity of virtual products, the question arises, when intangible goods, like music, software or video download,330 are delivered in terms of article 30 CISG.

Transfer of property in the goods sold is not within the scope of the CISG, but is, according to article 4 (b) CISG, rather reserved to domestic laws.331

The term ‘delivery’ in article 30 CISG obliges the seller merely to provide the buyer with possession, so to bring the goods into the buyer’s sphere of control, so that he can examine them.332 Particulars are established in article 31.

The regular download is not problematic, since it can be categorised as a new form of mail order purchase, which is admissible under article 31 (a) CISG.333

It is more problematic, when the seller keeps the original product on his hard disk despite the buyer’s download of the product, as e.g. the German law requires from the buyer a complete handover of the possession on the goods to the buyer.334

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329 This problem will be discussed in detail only for issues inherent to electronic communications. Other problems of breach of contract or the parties’ remedies thereto will not be examined, since there are no specific problems concerning electronic commerce.

330 The question how to treat ‘intangible’ goods in the context of article 1 CISG has been discussed in great detail in Chapter 3, 1, 1.)

331 Schlechtriem, Commentary (1998), article 4, para. 18, article 30, para. 7. The domestic law is concerned with the question ‘how’ the property is transferred.


333 Wulf, E-commerce, p. 160.

334 Palandt, Kommentar, § 929, para. 9.
But as there can be no difference in the legal treatment of offline contracts concerning standard software, music or movies embodied on a disk and a digital download, where the ‘original product’ remains in the seller’s possession, the same principle must apply to the performance of these contracts.

It also is agreed, that the seller’s obligation to hand over relevant documents is met by electronic transmission of these documents.

Article 35 CISG requires the seller to deliver the goods in the stipulated manner and free of rights of a third party. This of course also applies to all forms of electronic contracts.

b.) Online performance of the buyer’s obligation

The relevant question in connection with the buyer’s obligation to pay (article 53 CISG) is, whether the seller is obliged to take part in the buyer’s electronic payment system. Such an obligation can exist only, where the parties agreed to a particular trade usage in terms of article 9 CISG.

5.) Remedies for breach of contract

The buyer’s remedies (articles 45-52) as well as the seller’s remedies (articles 61-65) do not require any special treatment in connection with electronic commerce. The relevant provisions apply irrespective of whether the contract has been formed by traditional or by electronic means. Where the CISG requires a party to give notice (e.g.: articles 32 (1), 39 (1), 43 (1), 47 (2), 63 (2), 67 (2)), notices can be given in electronic form.

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335 This problem has been discussed in detail in Chapter 3, I, 1.) a.)
336 Online banking, digital payment systems or digital money.
337 Ramberg, ‘Electronic Communications’, articles: 32, 39, 47, 63, 67, 71. For more details to the form requirements see: Chapter 3, II, 2.)
III. Results concerning electronic communications under the CISG

The analysis of the Convention on Electronic Contracting has shown that the Convention neither deals with any parties’ contractual obligations nor with their rights in case of breach of these obligations. All these issues, which are addressed under the CISG, are left under the Convention to domestic law. Hence, any questions in this context concerning electronic commerce must also be solved under domestic law, rather than under the international law of the Convention. This is different under the CISG, since it provides plenty more substantive regulations. Therefore problems in electronic commerce concerning the above mentioned issues can lead to different results under both legal instruments. This is not surprising, as both legal documents, despite their joint goal of uniformity, have different legal targets.\(^338\) The Convention is not intended to establish uniform rules for substantive contractual issues that are not specifically related to the use of electronic communications, whereas the CISG addresses substantive contractual issues.

The CISG itself provides a flexible framework of provisions for the conclusion of contracts by any form of communication and can be interpreted, without resorting to farfetched explanations, to include classic forms of communication as well as electronic media.\(^339\) Although electronic commerce was not taken into account during the drafting, the provisions are sufficiently robust and flexible to deal with the changes and challenges posed by the new forms of communication and no changes are necessary to be made to the CISG. The issues that have been shown in this dissertation to be problems, do not stem from the use of more modern forms of communication, but rather are structural or conceptual deficiencies that existed from the outset and are applicable to all forms of communication.\(^340\)

\(^338\) The goal of the Convention on Electronic Contracting has been discussed in Chapter 2, I, 2.)
\(^339\) Hahnkampe, ‘Electronic communications’
CHAPTER 4: GENERAL CONCLUSION

The foregoing analysis has shown both the achievements and the weaknesses of the Convention on Electronic Contracting as well as the CISG. Despite problematic issues in both legal instruments, only these instruments can achieve uniformity in treatment of electronic communications. As the dissertation has demonstrated, in some issues both legal instruments come to the same results, but there are also diverse matters, which are addressed by one legal instrument only. Therefore the Convention on Electronic Contracting obtains its goal best, as a set of supplementary rules to the CISG, establishing mandatory provisions with regard to new means of communication and further increasing the CISG’s applicability for future changes in business reality, whereas the CISG serves as a basis for international trade, either by traditional or by electronic means.

Their common goal of uniformity in international trade can be achieved best by a collaboration of both treaties. Hopefully this will be recognised by many states.

Dealing with electronic commerce, it must be mentioned, that there are also other projects dealing with this issue.

The International Chamber of Commerce (ICC) has issued the ‘e-Terms 2004’[^341], which are a set of articles which parties can incorporate into the document that make it clear they intend to agree to a binding electronic contract.

It is obvious that the two lines of work are not mutually exclusive, in particular since the Convention deals with requirements that were typically found in legislation, and legal obstacles, being statutory in nature, can not be overcome by contractual provisions or non-binding standards.[^342] Although it might appear counterproductive to issue a further instrument on electronic commerce, it must be seen as a self-regulatory complement to the convention and not as its ‘opponent’.

[^341]: The ICC ‘e-Terms 2004’ can be found on: http://www.iccwbo.org/policy/law/id3668/index.html
[^342]: A guide how to use the terms can be found on: http://www.iccwbo.org/policy/law/id3670/index.html
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