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Overcoming the Obstacles to B2B Electronic Commercial Transactions:

A Comparative Analysis of International, EU, US and Chinese Law

By

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Volume I

Abstract

The exponential growth of electronic usage in global commercial transactions has led to new challenges relating to existing laws. In recent years, directives, conventions, regulations and laws have been introduced worldwide. However, because of the unique complexities of electronic commerce, legal solutions still lag behind, especially regarding electronic contracting.

This PhD thesis compares the legislative frameworks in the EU, US, China and International Organisations applicable to e-commerce and highlights the eight main obstacles to the development of electronic transactions. Based on these findings, it then provides an in-depth research into finding solutions to these obstacles and concludes that the best way to address them is through a sensible modernisation and harmonisation of international electronic commercial law rules, in particularly through the establishment of well-balanced area-specific international instruments. While being sufficiently comprehensive and practical to ensure cross-border trading, such instruments also need a sufficient degree of openness and flexibility to take into account future legal challenges due to technological innovations.

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From my experience, the PhD work requires both intellectual and emotional contribution (IQ and EQ). It is one of the toughest tasks in life. It is a job fulfilled with enthusiasms, energies and tears.

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I hope to continue contributing my best to our global legal society.

1. Chapter One

Introduction to Electronic Commercial Transactions

1.1 What are Electronic Commercial Transactions?

Computers feature increasingly in our lives. They are used in business to generate increased large profits, which could not be achieved by manual means. Computers can also reduce operating costs, increase turnover and improve effective management.[1] The new world has greatly benefited from the speed, compact storage and mathematically analysis of computer technology since the 1980s. It is even more exciting that nowadays computers can easily be connected to the Internet, which enriches our life in many ways and even changes our life pattern. Accordingly, businesses have moved from traditional offline to online platforms. This movement is mostly supported by Information and communication technologies (ICT). Electronic commercial transactions have been at the heart of economic changes for more than a decade.[2] However, it is very difficult to provide a definitive concept of electronic commercial transactions as it can take many different shapes and forms, and thus, it can only be understood by first explaining some other relevant concepts.

Internet

The Internet is a generic term for connected networks, which can be accessed worldwide. Professor Chris Reed defines the Internet as "an open network which permits communication between parties without the need for both to subscribe to the same closed

[1] Mawrey & Salmon (1988), p1-3.

[2] "OECD Factbook 2007 – Economic, Environmental and Social Statistics", Science and Technology, Size of the ICT sector, available at http://miranda.sourceoecd.org/vl=25119448/cl=11/nw=1/rpsv/factbook/07-02-01.htm (last visited on 20 April 2007).

network".[3] The Internet was initially established in the early 1970s, as the first trans-Atlantic computer networks were linked up[4]. Until 1991, the Internet was mainly used by the academic, military and governmental sectors.[5] It is only within the last ten years that commerce has increasingly been conducted over the Internet, selling goods and providing services electronically.[6]

Electronic Commerce: B2B v. B2C

So what is electronic commerce? The OECD defines electronic commerce as "all forms of commercial transactions involving both organizations and individuals, which are based upon the electronic processing and transmission of data, including text, sound and visual images. It also refers to the effects that the electronic exchange of commercial information may have on the institutions and process that support and govern commercial activities."[7]

In the EU, electronic commerce is generally deemed to be "any form of business transaction in which the parties interact electronically rather than by physical exchanges".[8] Electronic commerce "covers mainly two types of activity: one is the electronic ordering of tangible goods, delivered physically using traditional channels such as postal services or

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[3] Reed & Angel (2007), p.198.

[4] Terrett & Monaghan (2000), in Edwards & Waelde (2000) ed., p.2.

[5] Lloyd (2004), p.40.

[6] *Ibid*, p.42.

[7] Electronic Commerce: Opportunities and Challenges for Government (1997), at 11.

[8] A European Initiative in Electronic Commerce, COM (97) 157 at I (7).

commercial couriers; and the other is direct electronic commerce including the online ordering, payment and delivery of intangible goods and services such as computer software, entertainment content, or information services on a global scale."[9] In brief, e-commerce is the buying and selling of goods and services using the Internet.[10]

In a generic sense, e-commerce is composed of commercial transactions which involve two types of entities, private individuals and commercial entities.[11] From the definitions mentioned above, we can infer a number of factors: Firstly, e-commerce presupposes the existence of a business transaction. Secondly, the parties to such a transaction will maintain contact through electronic means rather than traditional ways of communication. Lastly, it is designed at creating a more efficient business environment.[12] In my view, e-commerce is conducted over the Internet, using electronic systems to carry on commercial transactions, such as selling goods or providing services.

There are mainly two types of electronic commercial transactions: business-to-business (B2B) and business-to-consumer (B2C). B2B encompasses a complex and fast set of

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[9] *Ibid.*

[10] European Commission, working paper eEurope, an Information Society for All, available at http://europe.eu.int/comm/information_society/eeurope/objectives/area03_en.htm (last visited on 20 January 2007).

[11] Reed & Angel (2007), p.198.

[12] Rosner (2004), p.483.

electronic activities between companies.[13] It can be completed by performance against payment or performance against performance.[14] In relation to B2C, the position is different from B2B, notably since one of the parties acts as a consumer and it involves the purchase of products by individuals outside their trade or profession. A synonymous term to B2C is electronic retailing.[15] In short, B2B provide goods or services to other businesses, while B2C sells goods or services to consumers.

1.2 Benefits: Economic and Social Impacts

A new universal Internet e-economy is emerging without any long-established commercial traditions or geographical borders:[16]

> "The year 2006 witnessed the rapid development of e-commerce around the world. E-Commerce became a powerhouse for economic globalisation. E-commerce application has become an important factor determining enterprises' international competitiveness. The success of Amazon and eBay in the U.S.A and China's Alibaba shows that e-commerce is leading the development of the global service industry, and affecting the development

[13] Vittet-Philippe (2000), p.1.

[14] Rosner (2004), p.483. An example of performance against performance can be when one party supplies statistical data in exchange for the results of a market research.

[15] *Ibid*, p.483.

[16] Mills (2004), p.443.

model of commerce in the future."[17]

The OECD (2006) also reported that "the Information and Communication Technology (ICT) industry was expected to grow by 6% in 2006 and, looking ahead, highest growth will be driven by Internet-related investments, Linux servers, digital storage, personal digital assistants and new portable consumer products".[18] ICT trade is also growing, even faster than production and sales. With the emergence of new growth economies in Eastern European and non-OECD developing countries, world ICT spending was up 5.6% a year between 2000 and 2005. China was the sixth largest ICT market in 2005 at US$ 118 billion behind the United States, Japan, Germany, United Kingdom and France. Although China's total ICT spending is still only about one-tenth of the United States, it is about two and a half times the spending of another newly emerging state, India (US$ 46 billion). ICT spending in non-OECD countries is still more focused on hardware than on services as the basic physical ICT infrastructure is still being built. After overtaking the United States in 2004 as the world's leading ICT exporter, China has continued its strong ICT exports since in 2005 and 2006.[19]

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[17] "2006-2007 Annual Report on the Development of Global E-Commerce Industry", 27 March 2007, by the China Center for Information Industry Development Consulting Co Ltd (CCID Consulting), available at http://chinamarket.ccidnet.com/pub/enreport/show_17192.html (last visited on 22 April 2007).

[18] "ICT industry growth set to increase by 6% in 2006, says OECD", available at http://www.oecd.org/document/34/0,3343,en_2649_37441_37487522_1_1_1_37441,00.html (last visited 7 September 2007).

[19] *Ibid.*

In 2006, the overall e-commerce turnover hit US$12.8 trillion, taking up 18% in the global trade of commodities.[20] On 23 January 2007, the China Internet Network Information Centre (CNNIC) published the "19th Statistical Survey Report on Internet Development in China".[21] The report shows that by the end of 2006, the number of the Internet users in China reached 137 million, accounting for 10.5% of China's population.[22] Compared to the same period in 2006, the number of Internet users in China has increased by 26 million.[23] At the same time, by the end of 2006, China's online transactions reached a record 1.1 trillion Yuan (around US$125 billion), an increase of 48.6% compared to 2005.[24] In 2007, the E-commerce market in China has still retained its exponential growth with the transaction volume exceeding 1.32 trillion Yuan (around US$150 billion) by August 2007,[25] in particular, B2B generated a total transaction value of 888 million yuan

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[20] "2006-2007 Annual Report on the Development of Global E-Commerce Industry", 27 March 2007, by the China Center for Information Industry Development Consulting Co Ltd (CCID Consulting), available at http://chinamarket.ccidnet.com/pub/enreport/show_17192.html (last visited on 22 April 2007).

[21] Statistical Survey Report on Internet Development in China (Jan. 2007), China Internet Network Information Center (CNNIC), available at http://www.cnnic.net.cn/uploadfiles/pdf/2007/2/14/200607.pdf (last visited 27 March 2007), thereafter called "Statistical Survey Report China 2007".

[22] CNNIC Released the 19th Statistical Survey Report on Internet Development in China, available at http://www.cnnic.net.cn/html/Dir/2007/02/05/4432.htm (last visited on 27 March 2007), thereafter called "CNNIC the 19th Survey Report".

[23] CNNIC the 19th Survey Report.

[24] "2006-2007 Annual Report on China's E-Commerce Market", 30 March 2007, by the China Center for Information Industry Development Consulting Co Ltd (CCID Consulting), available at http://chinamarket.ccidnet.com/pub/enreport/show_18116.html (last visited on 22 April 2007).

[25] "China's E-Commerce Enters Industrialization Era in 2007", China Market Intelligence Center, 30 August 2007, available at http://chinamarket.ccidnet.com/market/article/content/505/200708/170595.html (last visited 30 August 2007).

(US$114 million) during the first quarter of 2007.[26] It is estimated that over 3 million small and medium-sized companies will choose online transactions and their investment in e-commerce will rise by 35 percent every year to 100 billion Yuan (US$12.49 billion) in 2010.[27] According to the United States Department of Commerce, electronic commerce transactions in 2003 in the United States totalled almost $1.7 trillion.[28] The vast majority of U.S. e-commerce transactions (93.7%) are B2B rather than B2C.[29] In relation to the EU, according to the statistic survey of the European Commission (EU), the enterprises' receipts from sales through the Internet in the EU took up 4% of the total turnover in 2006, whereas in 2005, there was only 2.7%.[30] Referring to other statistics, the EU's Internet Users' Growth increased by 170.8% from 2000 to 2007, representing 51.8% of the total EU population and 21.8% of the world usage.[31] It is estimated that starting from basically zero in 1995, the total electronic commerce in the EU was worth €477 billion in 2003, and

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[26] "B2B E-Commerce Trade Valued at 888 Million RMB", China Market Intelligence Center, 25 June 2007, available at http://chinamarket.ccidnet.com/market/article/content/505/200706/141565.html (last visited 26 June 2007).

[27] Xinhua News Agency 19 July 2006: "Online Transactions to Hit US$125b This Year", available at http://www.china.org.cn/english/2006/Jul/175177.htm (last visited on 22 April 2007).

[28] U.S. Dep't of Commerce, E-Stats, May 11, 2005, at 2, available at www.census.gov/eos/www/papers/2003/2003finaltext.pdf (last visited on 23 February 2007).

[29] *Ibid.*

[30] EUROSTAT, "E-Commerce via Internet: Percentage of Enterprises' total turnover from E-Commerce via Internet", available at http://epp.eurostat.ec.europa.eu/ (last visited on 20 April 2007).

[31] "Internet Usage in the European Union"(Internet User Statistics & Population for the 27 European Union member states the European Union), Internet Statistics were updated for June 30, 2007, available at http://www.internetworldstats.com/stats9.htm (last visited 7 September 2007), it is growing according to the statistics in 2005 that Internet Users' Growth increased by 143.5% from 2000 to 2005, representing 49.3% of the total EU population.

will reach €2,423 billion by the end of 2007.[32]

E-commerce also presents some additional specific benefits: "the wide application of e-commerce reduces enterprises' operation and management cost, facilitates the flow of capital, technology, products, services and human resources worldwide, and propels economic globalisation"[33]. Perhaps one of the most obvious features of e-commerce is the speed with which transactions are being concluded. This is the case for instance when electronic materials are being purchased as the simple downloading of the software in question can last for only a few moments. Another feature is that due to the Internet's global accessibility, a company or legal person offering goods, services or electronic materials by using this medium can reasonably expect to sell products worldwide. Furthermore, once electronic transactions have been concluded, there will be an electronic file (for example, offer and acceptance or other trading documents) which is easier and more permanent to store than traditional paper documents.

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[32] Reported from the European Information Technology Observatory, Policy briefs – Electronic Commerce, available at http://ec.europa.eu/unitedkingdom/information/policy_briefs/bb08a_en.htm (last visited 7 September 2007).

[33] "2006-2007 Annual Report on the Development of Global E-Commerce Industry", 27 March 2007, by the China Center for Information Industry Development Consulting Co Ltd (CCID Consulting), available at http://chinamarket.ccidnet.com/pub/enreport/show_17192.html (last visited on 22 April 2007).

1.3 Technical and Legal Barriers

1.3.1 The Technical Context

New information and commutation technologies are growing everyday. Barriers become challenges to lawmakers, because it is crucial to adjust e-commerce regulations to the development of market and technology. Firstly, the lawmakers or law scholars, who are non-computer science experts, might not be familiar with the changing e-transaction technical environment, and it will be difficult for them to get a genuine insight into the needs of this new and rapidly expanding industry. Secondly, new technologies are developed and applied in e-commerce industries in the developed countries while some developing countries like China are emerging, but, the technologies employed in some of developing countries may lag behind and be incompatible with international standards. It raises conflicting issues in relation for instance to security and, therefore, the validity of electronic transactions, especially when involving cross-bordered deals. This can be affected by a slow access speed, insufficient language information on the web, an inability to protect personal privacy or poor Internet Service Providers (ISPs).

1.3.2 E-Trust and E-Confidence

Trust is central to any commercial transaction. Businesses are often chosen on the criterion whether they can be trusted. The recent Chinese Survey "Lack of Trust Stifles Online Trade" by the China Electronic Commerce Association (CECA) alarmingly discovered that more than a third of Chinese companies with experience in online trading do not trust

e-commerce, while an earlier report showed that 71.1% of Chinese Internet users, who would buy or sell something on line, were wary of fraud.[34]

Trust is not a characteristic that is inherent to an e-commerce site, but it is a judgment made by the user, based on the personal experience learned from being a customer and from their perception of the particular merchant. Trust can be defined as:

> "the subjective assessment of one party that another party will perform a particular transaction according to his or her confident expectations, in an environment characterized by uncertainty".[35]

In e-commerce, there are two basic kinds of trust: identification-based trust (IBT) and calculus-based trust (CBT).[36] The former depends on the existence of a good relationship and empathy between the parties. When the parties care about each other and can understand the other side's perspective, IBT may suffice.[37] In relation to the latter, CBT, individuals do what they promise to do or what is clearly expected of them out of a desire to avoid unpleasant penalties,[38] rather than out of a sense of obligation or empathy. This

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[34] China Daily 5 September 2006, "Survey: Lack of Trust Stifles Online Trade", available at http://www.china.org.cn/english/2006/Sep/180141.htm (last visited on 22 April 2007).

[35] Ba & Pavlou (2002), 243, p.245, cited from Rietjens (2006), 55, p.59.

[36] Raines (Spring 2006), 359, p.364.

[37] *Ibid.*

[38] Lewicki & Wiethoff (2000), cited from Raines (Spring 2006), 359, p.364.

has also been called deterrence-trust.[39] In brief, trust always entails at least one party being vulnerable to the actions of another, and that party therefore depends upon, relies on, or trusts the other party not to exploit that vulnerability.[40] It can be also defined as "one's willingness to rely on another's actions in a situation involving the risk of opportunism"[41], which can be achieved through "confidence associated with professional certification, ethics and training."[42]

With the advent of the Internet economy, social trust has become a source of great importance for those concerned with economic expansion. Trust is needed most when risks are perceived to be high. And e-commerce is perceived as highly risky by all accounts. This major barrier to participation in e-commerce has been widely discussed in industry publications.[43] People are reluctant to give private information over the Internet, because they are concerned about the validity of e-contracts, misuse of credit cards and dispute resolutions. To a considerable extent, business actors hesitate to engage into e-market activities because they feel unsafe about the following issues: "i) if and to what extent new partners introduced through the e-market platform at a distance can be trustworthy; ii) if and to what extent the transaction will be executed without problems; iii) if and to what extent, the IT system supporting technically the platform is secure; and iv) if and to what

[39] Raines (Spring 2006), 359, p.364.

[40] Hosmer (1995), 379, p.381-82.

[41] Williams (2001), 377, p.378.

[42] *Ibid.*

[43] Mutz (Fall 2005), 393, p.398.

extent, failures in the execution of transactions can be remedied or compensated".[44] Thus, real trust should be established with concerns of creating reliable relationships and enhancing the ability of parties to hold a company accountable for its promises and practices.[45]

Barriers to electronic commerce offer opportunities for taking a new look at commercial legal regulations. What makes electronic commerce unique and also attractive fits uneasily with the traditional legislation. In brief, while the attributes of the Internet enable electronic commerce, they also hinder its growth for reasons as varied as lack of trust or uncertainty about the regulatory environment.[46] Increased trust can prove beneficial for web businesses. Once users feel more secure, they will visit more websites and conduct more transactions online; overall Internet traffic will grow.[47] Building trust and boosting confidence requires legal and technical tools, such as mechanisms for ensuring validity and enforceability of e-contracts, as well as providing security, certification, privacy, redress, users' training,[48] and dispute resolutions. These are the key elements for online trust.

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[44] "Legal Study on Unfair Commercial Practices within B2B e-markets – Final Report", European Commission Study ENTR/04/69, (May 2006), p.18.

[45] Fort & Liu (November 2002), 1545, p.1552-1553.

[46] OECD: "Dismantling the Barriers to Global Electronic Commerce", 16 October 1997, available at http://www.oecd.org/document/32/0,2340,en_2649_33757_1814368_1_1_1_1,00.html (last visited on 21 April 2007).

[47] Goldman (Spring 2006), 353, p.369.

[48] OECD: "Dismantling the Barriers to Global Electronic Commerce", 16 October 1997, available at http://www.oecd.org/document/32/0,2340,en_2649_33757_1814368_1_1_1_1,00.html (last visited on 21 April 2007).

1.3.3 Legal Obstacles

E-commerce is significant to business, because of its speed, convenience and efficiency of the electronic world. As noted, "e-commerce creates revenue streams, saves costs, and enables businesses to manage their inventory."[49] Accompanying these benefits, however, are numerous complex and often novel legal issues. Most notably, it is frequently difficult to apply traditional contract laws to the online environment, not the least because there are no jurisdictional boundaries in cyberspace. In addition, there are numerous dispute resolution issues that are specific to the online environment. Regardless of the extent to which the "new e-economy" really does change the way we do business, it will certainly require the world to seek "new paradigms in many facets of the law".[50] Companies or legal persons active on the Internet may at times be difficult to trace according to traditional criteria, i.e. statutory seat, central administration or principal place of business.[51]

Legal certainty is important for transactions carried out electronically. When forming a contract online, there are a number of concerns, such as whether it is enforceable, what the terms are, which court has jurisdiction and whose law applies in case of a breach of the contract.[52] The evidential weight of electronic documents must also be considered. For

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[49] Schulze & Baumgartner (2001).

[50] Mills (2004), p.431.

[51] Rosner (2004), p.491.

[52] Bainbridge (2008), p.355.

example, will a contract concluded online using an electronic signature be admitted in court as evidence and proof of a person's consent to a transaction?[53]

In relation to the above issues, international organizations, the European Union, and the United States have responded to them by enacting a series of directives, or model laws. They have attempted to provide legal frameworks for electronic commercial transactions. The next section will focus on these frameworks.

1.4 Regulatory Framework of Electronic Transactions

1.4.1 Global Regimes

The United Nations Convention on the Use of Electronic Communications in International Contracts[54] (thereafter "UN Convention") was adopted by the General Assembly on 23 November 2005. The primary purpose of the UN Convention is "to facilitate international trade by removing possible legal obstacles or uncertainty concerning the use of electronic communications in connection with the formation or performance of contracts concluded between parties located in different countries"[55]. It aims to "enhance legal certainty and

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[53] *Ibid*, p.357.

[54] The United Nations Convention on the Use of Electronic Communications in International Contracts, Resolution adopted by the General Assembly on the report of the Sixth Committee (A/60/515), Agenda Idem 79, A/RES/60/21, 9 December 2005.

[55] Explanatory Note – United Nations Convention on the Use of Electronic Communications in International Contracts, New York, 2007, available at http://www.uncitral.org/pdf/english/texts/electcom/06-57452_Ebook.pdf (last visited 18 April 2007), thereafter "Explanatory Note 2007".

commercial predictability" in international electronic contracts. It addresses issues such as legal recognition of electronic communication, the location of parties, the time and place of dispatch and receipt of electronic communication, use of automated message systems for contract formation, availability of contract terms and errors in electronic communications.[56] The UN Convention is also intended to be as technologically neutral as possible, in order to cover electronic communications in multiple forms in relation to existing or contemplated contracts exchanged between parties.[57] It aims to stimulate the progress to harmonise national laws, which will at least reduce legal uncertainty in transnational business transactions.

The UNCITRAL Model Law on Electronic Commerce[58] (thereafter "Model Law on E-Commerce") was adopted by UNCITRAL on 12 June 1996. Generally, as a minimalist approach, the primary motivation is to remove existing legal obstacles to the recognition and enforceability of electronic signatures and records. It does not address specific techniques, and therefore, it intends to be technology-neutral. This minimalist approach focuses on verifying the intent of the signing party rather than on developing particularised

[56] Available at http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/2005Convention.html (last visited 07 April 2007).

[57] Connolly & Ravindra (2005).

[58] The Model Law on Electronic Commerce adopted by the United Nations Commission on International Trade Law (UNCITRAL), Resolution adopted by the General Assembly on the report of the Sixth Committee (A/51/628), Agenda Idem 148, A/RES/51/162, 30 January 2007.

forms and guidelines.[59] It is supposed to help states enhance their legislation in respect to electronic communications and to serve as a reference aid for the interpretation of existing international conventions and other instruments in order to avoid impediments to electronic commerce.[60] The Model Law on Electronic Commerce deals generally with the use of modern means of electronic communications and storage of information,[61] the formation and validity of electronic contracts,[62] the legal recognition of data messages[63] and the carriage of goods.[64]

Electronic signature and authentication is an encryption technology which is employed in electronic commercial transactions to ensure online business security. However, there is need to promulgate model laws and national regulations to remove the legal uncertainty of the identity recognition of online parties and the validity of their conducts. This led the United Nations Commission on International Trade Law to declare that "the risk that diverging legislative approaches be taken in various countries with respect to electronic signatures calls for uniform legislative provisions to establish the basic rules of what is inherently an international phenomenon, where legal harmony as well as technical

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[59] Moreno (2001).

[60] Glatt (1998), p.57.

[61] Available at http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/1996Model.html (last visited 7 April 2007).

[62] The UNCITRAL Model Law on Electronic Commerce, Article 11.

[63] *Ibid*, Article 6 to Article 8.

[64] *Ibid*, Article 16.

interoperability is a desirable objective."[65]

The UNCITRAL Model Law on Electronic Signatures[66] (thereafter "Model Law on E-signatures") was adopted by UNCITRAL on 5 July 2001. It follows a technology-neutral approach, which avoids favouring the use of any specific technical product.[67] This approach achieves legal neutrality by granting minimum recognition to most authentication technologies, while at the same time incorporating provisions for an authentication technology of choice.[68] It gives a developed legal framework for certificate service provision within an international operative public key infrastructure (PKI) and promotes the progressive harmonisation and unification of measures and policies on e-signature issues.

The International Chamber of Commerce (ICC) was founded in 1919 with an overriding aim that remains unchanged: to serve world business by promoting trade and investment, open markets for goods and services, and the free flow of capital.[69] The ICC has become the world's largest business organization being dedicated to business self-regulation, with

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[65] UNCITRAL Model Law on Electronic Signatures with Guide to Enactment 2001.

[66] The Model Law on Electronic Signatures of the United Nations Commission on International Trade Law, Resolution adopted by the General Assembly, on the report of the Six Committee (A/56/588 and Corr.1), Agenda Item 16, A/RES/56/80, 24 January 2002.

[67] Available at http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/2001Model_signatures.html (last visited 7 April 2007).

[68] Moreno (2001).

[69] 'What is ICC' at http://www.iccwbo.org/home/menu_what_is_icc.asp (last visited 9 March 2007).

over 8,000 member companies and associations in more than 130 countries. It sets voluntary rules that companies from all parts of the world apply to millions of transactions every year. It also contributes to international and regional initiatives on electronic contracting,[70] like for instance the General Usage for International Digitally Ensured Commerce (GUIDEC), ICC eTerms 2004 and ICC Guide to Electronic Contracting. The GUIDEC has built upon the work of UNCITRAL Model Law on Electronic Commerce and the American Bar Association's Digital Signature Guidelines. It attempts to create a general framework for the use of digital signatures in international commercial transactions. It mainly deals with digital signatures and the role of registration and certification authorities in electronic commerce. Moreover, the ICC eTerms 2004 are designed to enhance the legal certainty of contract made by electronic means, providing parties with two short articles, easy to incorporate into contracts, which expressly states that both parties agree to be bound by an electronic contract.[71] The eTerms can be used for any contract for the sale or other arrangement of goods, or services. The ICC eTerms 2004 aims to facilitate the procedures and the use of electronic means in concluding a contract without interfering with the subject matter of the contract and any other agreed terms between parties. The ICC eTerms 2004 can be applied in any type of electronic contracting, through a website, by e-mail, or by EDI. They are seen as a logical extension of the ICC's array of rules, model contract clauses and guidelines that feature daily in countless

[70] Astrup (2003).

[71] Available at http://www.iccwbo.org (last visited 9 March 2005).

paper-based international business transactions.[72] Furthermore, ICC Guide to Electronic Contracting (thereafter "the Guide"), answered the questions, for instance, how to apply ICC eTerms 2004; what is the legal validity of ICC eTerms 2004; what are the limits of ICC eTerms2004; who contracts on your behalf; with whom are you contracting; how to construct an electronic contract; what are technical specifications; how to protect confidentiality; and how to cope with technical breakdown and risk management. The Guide provides a useful explanatory supplement to the ICC eTerms (2004), however, it would have been advisable to split it into subsections to make it clearer for the use of eTerms.

At the same time, other international organisations such as the Organisation for Economic Co-operation and Development (OECD) and the World Trade Organisation (WTO) also regulate e-commerce taking into account cultural, economical and political differences. The OECD "has permitted a broad-based policy reflection on the establishment of an adequate infrastructure, as well as the elements that would provide a favourable environment for electronic commerce and the digital economy",[73] whereas the WTO takes into account the economic, financial, and development needs of developing countries.[74]

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[72] "ICC rules on e-contracting are on their way", Paris, 15 September 2003, at http://www.iccwbo.org/home/news_archives/2003/stories/e-terms.asp (last visited 9 March 2005).

[73] "OECD Electronic Commerce Policy Brief", available at http://sourceoecd.org/data/cm/00004164/Science2.pdf (last visited 16 February 2005).

[74] Panagariya (2000).

1.4.2 National Regimes

1.4.2.1 EU

Electronic Commerce is a product from the information technology revolution developed within the global marketplace, including the European Union. With these growing numbers in mind, up-to-date legislation is imperative in order to meet the expanding needs of commercial transactions over the Internet. In order to keep pace with market developments, the EU has already created an extensive legal framework addressing various issues on 'Information society services' and, most notably, Electronic Commerce. These include the Directive on "Certain Legal Aspects of Information Society Services, in particular Electronic Commerce in the Internal Market", 2000/31 EC dated 8 June 2000 (thereafter "Electronic Commerce Directive"), and the Directive on "A Community Framework for Electronic Signatures" 1993/93/EC, dated 13 December 1999 (thereafter "Electronic Signatures Directive").

In relation to the latter, Frits Bolkestein, the former Internal Market Commissioner, said that "the EC Directive is helping e-commerce to take off in the Internal Market by ensuring that Europe's e-commerce entrepreneurs can take full advantage of a domestic market of more than 370 million consumers."[75] Among the two related directives, the Electronic

[75] "E-Commerce: EU Law Boosting Emerging Sector", IP/03/1580, Brussels, 21 November 2003 at http://europa.eu.int/rapi.../1580&format=HTML&aged=1&language=EN&guiLanguage=e (last visited 31 October 2004).

Commerce Directive[76] plays an important role in regulating electronic transactions in the internal market between Member States. In order to enhance its efficiency, this Directive lays down a clear and general framework to cover certain legal aspects of electronic commerce in the internal market by creating a legal framework to ensure the free movement of information society services between Member States. It creates various rules including: transparency obligation on operators in commercial communications; [77] electronic contracts; limitations of liability of intermediary service providers; and provisions for on-line dispute settlement. However, the Electronic Signatures Directive[78] is a far more detailed directive and sets out a framework for the recognition of electronic signatures and certification service requirements for member states.[79] Article 1 specifies that the aim of the Directive is to establish a legal framework for electronic signatures and certain certification services. It wants to facilitate the use and legal recognition of electronic signatures, while ensuring the proper functioning of the internal market.[80] This should lead to the Electronic Signatures Directive promoting cross-border electronic commerce within the EU by encouraging electronic contracts.[81] However, the Directive does not cover "aspects related to the conclusion and validity of contracts", which is dealt

[76] Directive 2000/31/EC of the European Parliament and the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internet Market (Directive on electronic commerce), O. J. 2000 L 178/1.

[77] Bogle & Mitchell (2000).

[78] "Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community Framework for Electronic Signatures", O.J. 2000 L 13/12.

[79] Thurlow (2001).

[80] *Ibid.*

[81] Copeland (2000).

with in the E-commerce Directive.[82] Excluded are also "legal obligations where there are requirements as regards form prescribed by national or Community Law", and, finally the Directive is not meant to "affect rules and limits, contained in national or Community law, governing the use of documents".[83]

1.4.2.2 US

The United States is a free-market, capitalist economy. This has become even more apparent as the U.S attempts, through its role as the world's economic hegemony, to spread political and economic deregulation via treaties (both bilateral and multilateral), and its role in, and arguably control over, international organizations such as the United Nations (UN) or the World Trade Organization (WTO). As a free-market economy, the US subscribes, in principle, to a hands-off, minimalist approach to the regulation of commerce.[84] However, the need for a coherent set of rules that would promote certainty, predictability and security gave rise to action by US authorities at both state and federal level. Proposed and enacted legislation dealing with electronic contracting capabilities are heavily influenced by the UNCITRAL Model Law on E-Commerce and, in general tend to reflect the functional equivalent method to writing requirements.[85] According to Bill Clinton's Framework for Global Electronic commerce, there are five principles that the US

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[82] Lodder (2000).

[83] Article 1 of the EC Directive on Electronic Signatures.

[84] Pappas (2002), 325, p. 327.

[85] Boss (1998), 1931, p.1933.

and other nations, should adhere to in attempting to regulate e-commerce: "(1) The private sector should lead; (2) Governments should avoid undue restrictions on electronic commerce; (3) Where governmental involvement is needed, its aim should be to support and enforce a predictable, minimalist, consistent, and simple legal environment for commerce; (4) Governments should recognize the unique qualities of the Internet; and (5) Electronic Commerce over the Internet should be facilitated on a global basis."[86]

Each individual state in the U.S. has considered the ramifications of electronic commerce and electronic signatures and has either passed or is introducing electronic signatures legislation.

As each state has a different law on electronic signatures, some groups and organisations have attempted to standardise and unify the various laws into a uniform law. The National Conference of Commissioners on Uniform State Laws (NCCUSL) and the American Law Institute (ALI) have promulgated separate state uniform laws addressing electronic signatures, the Uniform Computer Information Transactions Act (UCITA) and the Uniform Electronic Transactions Act (UETA).[87]

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[86] Clinton & Gore (1997).

[87] Lupton (1999).

The UCITA, initially originated from a proposal for a new UCC Article 2 and was approved as a legislative model by the NCCUSL on July 29, 1999, has only been signed and enacted by two states, Maryland and Virginia.[88] The UCITA is a model "uniform commercial code" for software licenses and other computer information transactions. It addresses issues such as digital signatures, electronic records, and electronic agents. The UCITA adopts the accepted and familiar principles of contract law. This act provides a set of comprehensive rules for licensing computer information, whether computer software and other clearly identified forms of computer information.[89]

It also governs access contracts to sites containing computer information, whether online or offline. The UCITA also applies to storage devices, such as disks and CDs that exist only to hold computer information. Other kinds of goods, which contain computer information as a material part of the subject matter of a transaction may also be made subject to the UCITA by express reference in a contract. Otherwise, other laws will apply, such as the law of sales or leases for most transactions. The UCITA does not govern contracts, even though they may be licensing contracts, for the traditional distribution of movies, books, periodicals, newspapers, or the like.[90] It is quite apparent that the UCITA is

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[88] "UCITA & Related Legislation In Your State", last updated in May 2006, available at http://www.ala.org/ala/washoff/woissues/copyrightb/ucita/states.cfm (last visited 7 September 2007).

[89] A summary of the UCITA, available at http://www.nccusl.org/nccusl/ucita/UCITA_Summary.pdf (last visited 7 September).

[90] National Conference of Commissioners on Uniform State Laws — Summary of Uniform Computer Information Transactions Act, available at

intended to operate in a similar fashion to the UNCITRAL Model Law on E-Commerce through reliance on functional equivalency and avoids specific technological requirements.[91]

The UETA, promulgated in July of 1999, like the UCITA, is a model code, which has been adopted by 48 states and the District of Columbia.[92] It differs from the UCITA in that it is addressed to electronic transactions generally. The aim of the NCCUSL in fashioning the UETA was to provide States with a set of uniform rules governing electronic commerce transactions.[93]

The primary objective of the UETA is to provide electronic transactions with the same legal effect as paper transactions without changing any applicable substantive laws. Under the UETA, parties are free to choose a contract electronically or through traditional means. Furthermore, parties may agree to utilise only part of the provisions of the UETA, even if business will be transacted by electronic means. Furthermore, the UETA differs from the UCITA in that the former governs all electronic transactions, whereas the latter does not

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http://www.nccusl.org/Update/uniformact_summaries/uniformacts-s-ucita.asp (last visited 12 November 2004).

[91] Thurlow (2001).

[92] As of October, 2004, 48 states and the District of Columbia had enacted UETA, ULC Bulletin, available at http://www.nccusl.org/nccusl/newsletters/ULC/ULCbull_Oct04_print.pdf (last visited 18 November 2004).

[93] A summary of the UETA, available at http://www.nccusl.org/Update/uniformact_summaries/uniformacts-s-ueta.asp (last visited 7 September 2007).

deal directly with the substantive issues involved with electronic contracts.[94]

The Electronic Signatures in Global and National Commerce Act (ESIGN), was signed by President Clinton on 30 June 2000 and most of its provisions became effective on 1 October 2000. The E-SIGN was enacted, in part, to promote consistency and certainty regarding the use of electronic signatures in the United States.[95] The ESIGN Act, like the UCITA, adopts a technology-neutral approach, different from the two-tier approach of the UETA. This Act regulates any transactions in interstate and foreign commerce. It provides a framework that is intended to facilitate transactions in electronic form or includes an e-signature, which includes several key provisions concerning, for example, its scope, validity requirements for electronic signatures, electronic contracts and electronic records or retention requirements for electronic contracts and goods.

1.4.2.3 China

Before the legal framework and the necessary infrastructure for the use of digital signatures was established, electronic contracting was not widely used in business transactions, which in turn prevented the development of e-commerce in China. To resolve this problem, the Standing Committee of the 10th National People's Congress passed the Law of the People's Republic of China on Electronic Signatures (Chinese Electronic

[94] Nimmer (2001).

[95] Gidari & Morgan (2000).

Signatures Law) on 28 August 2004, [96] which entered into effect on 1 April 2005 and provides a legal basis for electronic transactions.

The purpose of the Chinese Electronic Signatures Law is to regulate the act of electronic signature, establishing the legal effect of electronic signature, and maintaining the lawful rights and interests of the relevant parties concerned.[97] It applies to parties who may stipulate their intention to use or not to use electronic signature or data message in the contract or other documents and civil documentations. Any document using electronic signatures or data messages will have the same legal effect as handwritten documents. The Chinese Electronic Signatures Law leaves the parties to decide whether or not to use electronic signatures and messages and its provisions. However, certain types of agreements such as those relating to personal relations, the transfer of real estate rights and interests, and public utility services cannot use electronic means as prescribed by laws and administrative regulations, and therefore, have to apply to the traditional formal requirement: in writing.[98]

Overall, the differences of e-commerce legislation between the international organisations, EU, US and China can be shown as below (Figure 1):

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[96] Law of the People's Republic of China on Electronic Signatures (thereafter "Chinese Electronic Signatures Law"), PRCLEG 3691, 2004, available at http://www.transasialawyers.com/translation/legis_03_e.pdf (last visited 7 September 2007).

[97] Article 1 of the Chinese Electronic Signatures Law.

[98] *Ibid*, Article 3.

Figure1: Comparison Table of Electronic Commerce Legislation Methods

(P.S. the Utah Digital Signature Act is regarded as a digital signatures approach)

Countries	Legislation	Minimalist Approach (Tech. Neutral)	Two-Tier Approach (Criteria Based)	Digital Signatures Approach (Prescriptive Approach)
EU	E-Commerce Directive	YES	NO	NO
	E-Signatures Directive	NO	YES	NO
US	Uniform Compute Information Transactions Act (UCITA)	YES	NO	NO
	Electronic Transactions Act (UETA)	NO	YES	NO
	Electronic Signatures in Global and National Commerce Act (ESIGN)	YES	NO	NO
China	Electronic Signatures Law	YES	NO	NO
UNCITRAL	Model Law on Electronic Commerce	YES	NO	NO
	Model Law on Electronic Signatures	NO	YES	NO
	UN Convention on the Use of Electronic Communication in International Contracts	YES	NO	NO

1.5 Objectives and Approaches of the Thesis

The exponential growth of electronic usage in global commercial transactions has created new challenges to existing laws. Some of the legal solutions still lag behind, because of the unique complexities attached to electronic commerce. In order to encourage electronic commerce, efforts to reform or establish international commercial laws may be needed to make them suitable to different cultures, economies and policies, comprehensive and practical to enable safe cross-border trading, sufficiently open to the upgrading technology innovations, and manageable to build up e-trust and e-confidence.

In analysing these issues, this PhD thesis focuses on B2B electronic commercial transactions, surveys the comparative electronic commerce statistics, and compares the legislative frameworks in the EU, US, China and international organizations in general. It then provides an in-depth research into firstly, validity and formation of electronic contracting; secondly, jurisdiction issues in electronic contracting; thirdly, choice of law issues in electronic contracting; fourthly, electronic signatures and authentication; fifthly, dispute resolutions, and finally, proposes recommended solutions to overcoming the obstacles of electronic commercial transactions. It aims to create a harmonised international practical legal approach for electronic commerce and dispute resolutions.

The thesis first asks what the barriers to electronic commercial transactions are, and answers them by finding the solutions. There are mainly eight obstacles to electronic commercial transactions:

1. How can one build an infrastructure for trusted e-commerce, and thereby build trust among e-commerce customers?
2. What constitutes a valid electronic contract?
3. How can electronic battle of forms, automated message systems and errors in electronic communications be dealt with?
4. How can jurisdiction be determined in electronic contracts?
5. What law is applicable to electronic contracts?

6. How can the recognition of electronic signature and authentication be ensured?

7. How can disputes referring to electronic contracting be resolved?

8. How can the decisions of online dispute resolution be enforced?

According to the above issues, the thesis starts the discussion with electronic contracting. It is one of the most challenging and important subjects in electronic commerce, because legal certainty is the basis of building trust in doing business online. Chapter Two will be based on the most current international legislation, the UN Convention on the Use of Electronic Communications in International Contracts, and compare it with the EU, US and Chinese relevant legislations. It will examine whether it is sufficient to merely guide the conduct of international electronic commercial contracts without resorting to mandatory, binding rules, by analysing factors such as the validity of an electronic contract, the time and place of dispatched and receipt of an electronic communication, errors in an electronic communication, and the location of parties. This also contributes to the two most debatable issues in electronic contracting: one is offer and acceptance, and the other is the battle of forms. Those two issues, unfortunately, were not included in the UN Convention and other national legislations.

After finding under what conditions an electronic contract is valid, the next focal point will be: when disputes arise, which court will have jurisdiction? Jurisdiction, one of the oldest and most complicated issues in traditional laws, is even more complex in the online

environment. When the digitised goods delivers electronically, the place of delivery is no longer physical, thus it is much more difficult to ascertain the place of delivery online than offline. So will it affect the traditional principle of determining jurisdiction? Chapter Three examines general, special and exclusive jurisdiction issues by looking at the Convention on Choice of Court Agreements, EU Brussels I Regulation, US cases and Chinese laws, and attempts to find solutions to remove obstacles to the determination of Internet jurisdiction.

After having determined which court will have jurisdiction to hear the case, the next issue will concern which law will govern the contract, i.e., the issue of choice of law. Chapter Four analyses the Rome Convention, the US and Chinese legislations through discussing two main points: one is the applicable law in cases of choice and the other is the applicable law in the absence of choice. It will conclude by recommending some amendments to the proposal of the Rome I Regulation.

Having analysed the existence of electronic contracts alongside the jurisdiction and choice of law clauses, electronic signatures and authentication will be the next issue to be discussed in Chapter Five. E-signature with authentication is a security tool to ensure the safety of electronic transactions. It identifies contracting parties and their affixed documents utilising encryption. It is essential that the conduct of Certification Authorities must be regulated, because the quality and trust in electronic authentication services will affect the operation of electronic market. In most national laws, both non-recognised and

recognised certification authorities can be allowed to provide electronic authentication services and even may have the same effects on certificates. The chapter will tackle issues such as: what constitutes sufficient signature and authentication to secure electronic commercial transactions, what will be the liabilities of Certification Authorities, and how can the recognition of foreign certificates be ensured?

The last issue in this thesis, but not the least, deals with online dispute resolution (ODR). ODR is the equivalent to electronic alternative dispute resolution and cybercourt, moving traditional offline dispute resolution and litigation online. It has been a new challenging and much researched issue since the mid 1990s. Its occurrence will boost the confidence of doing business online and certainly be more efficient than offline methods in cases that have an "international" or "cross-border" factor but only involve lower financial amounts. Chapter Six will discuss the most updated issues in relation to online dispute resolution and recommend a proposal for the conduct of ODR.

2. Chapter Two

Electronic Contracting

2.1 Introduction

'The customer pays his money and gets a ticket. He cannot refuse it. He cannot get his money back. He may protest to the machine, even swear at it. But it will remain unmoved. He is committed beyond recall. He was committed at the very moment when he put his money into the machine.'

Lord Denning, Thornton v Shoe Lane Parking[99]

With the advent of electronic means of communication and information transfer, business deals are fast-becoming conducted over the Internet, taking advantages of the speed, efficiency, and cost benefits of electronic technologies. Clicking the icon of "I agree" on the web page may have the same effects as "money machines". According to the 16th Statistical Survey Report on the Internet Development in China, as of the 30th of June 2005, more than 20 million people had conducted transactions on the Internet so far, indicating a huge market potential.[100] With regard to the US Department of Commerce Report[101], two of the activities with the greatest growth between 2001 and 2003 were online purchases of goods and services (e-commerce) and online banking. The proportion of Americans

[99] [1971] 2 QB 163 at 169, cited from Gringras (2003), p.14.

[100] 16th Statistical Survey Report on the Internet Development in China (July 2005), China Internet Network Information Center (CNNIC), available at www.cnnic.cn (last visited 6th November 2005).

[101] Cooper & Gallagher (Sep 2004).

engaging in e-commerce has grown by 8% over the 2001-2003 periods.[102] Businesses can form contracts without ever touching a pen or shaking hands, which may cause obstacles, requiring adaptations of traditional contract laws. How to ensure that an electronic contract is valid and enforceable is one of the most important elements to the fundamental components of electronic commercial transactions.

Due to the fact that national boundaries are so easily crossed, international electronic contracting faces a patchwork of legal regimes. Clicking an "I Agree" or "I Accept" icon on a web site may constitute a valid form of consent between two parties in different countries. How to avoid, for instance, that the terms and conditions of an electronic contract contain exemption clauses which enable to escape all responsibility for losses arising out of electronic trading has become a core concern of the digital commercial market. For instance, eBay, the world's online marketplace, creates thousands of electronic contracts a day. It made a profit of $256 million in the first three months of 2005, up to 28% on the same period of 2004, on sales of more than $1 billion.[103] Although electronic contracting offers new possibilities for efficient transactions and greater flexibility and evolutionary capabilities, it also has new vulnerabilities to abuse and could face validity

[102] *A Nation Online: Entering the Broadband Age*, US Department of Commerce, September 2004, available at www.ntia.doc.gov/reports/anol/NationOnlineBroadband04.doc (last visited 29 August 2007).

[103] BBC News: eBay seeks sellers for expansion, on 24 June 2005 published at http://news.bbc..co.uk/go/pr/fr/-/1/hi/business/4619079.stm (last visited 25/06/2005).

questions in some legal systems.[104] That is, contracting on the World Wide Web may raise questions about legal effectiveness and validity. In particular, these commercial benefits create new issues for contract law. This Chapter will mainly consider the following questions:

1. *What is electronic contracting?*
2. *Who is contracting?*
3. *When is an electronic contract made?*
4. *If errors occur in electronic communications, what are the remedies?*
5. *Where is an electronic contract made?*
6. *How to deal with the Battle of Forms?*

Confronting the unpredictability of relevant laws to the above issues, scholars and legislators are searching for uniform rules for the use of electronic communications in international contracts. International organizations, such as the United Nations Commission on International Trade Law (UNCITRAL), the International Chamber of Commerce (ICC), the World Trade Organization (WTO), the Organization for Economic Co-operation and Development (OECD), the Hague Conference on Private International Law (Hague) and the International Institute for the Unification of Private Law

[104] General Usage for International Digitally Ensured Commerce (GUIDEC) Version II, International Chamber of Commerce (ICC), available at www.iccwbo.org (last visited 1 Oct 2005).

(UNIDROIT) are all participating in an emerging global debate concerning the changes that should be made to the form or substance of international commercial law to accommodate innovation in the technology of international trade[105], in particular towards a global agreement on electronic contracting.

2.1.1 What is electronic contracting?

The ICC refers to "Electronic Contracting" as "the automated process of entering into contracts via the parties' computers, whether networked or through electronic messaging".[106] This definition is an amalgamation of two separate explanations, one contained in the UN Convention[107] defining "electronic communication", and the other taken from the US UETA and UCITA providing for "automated transactions". "Electronic communication" means "any communication that parties make by means of data messages",[108] whereas, "automated transactions" means any transaction conducted or performed, in whole or in part, by electronic means or electronic records. In addition, electronic communication establishes a link between the purposes for which electronic communications might be used, and the notion of "data messages" which was important to

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[105] Winn (2002-3).

[106] General Usage for International Digitally Ensured Commerce (GUIDEC) Version II, International Chamber of Commerce (ICC), available at www.iccwbo.org (last visited 1 Oct 2005).

[107] United Nations Convention on the Use of Electronic Communications in International Contracts, 2005, A/RES/60/21, available at http://daccessdds.un.org/doc/UNDOC/GEN/N05/488/80/PDF/N0548880.pdf?OpenElement (last visited 10 June 2007)

[108] Article 4 (b) of the UN Convention.

retain.[109] This new concept gives a broader definition of electronic means of transactions and makes it compatible to a wide range of possibly developing techniques.

The UNCITRAL Model Law on Electronic Commerce states that "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, that contract shall not be denied validity or enforceability on the sole ground that a data message was used for that purpose."[110] There are two main ways in which contracts can be made electronically. A common and popular method is through the exchange of electronic mail (email). Email can be used to make an offer and to communicate an acceptance of that offer. The email containing the offer or acceptance can be sent through the offeror's (or offeree's) outbox, the digital equivalent of a postbox to a server, Internet Service Provider (ISP) and then forwarded to the offeree's (offeror's) inbox. The other method of contracting is using the World Wide Web. Normally, the vendor would provide a display of products on his website and indicate the cost of such products. A customer can scroll through the website previewing the items or products on offer, chick on the item for further information and if interested in the purchase, can place an order by filling in an order form and clicking "Submit", "I Accept", or something similar.[111] This is called "Clickwrap" or "Webwrap" agreements. It is like taking the goods to the cash register in a shop, except that the cashier will usually be a computer instead of a

[109] Wei & Suling (2006), 116, p.136.

[110] Article 11 of the UNCITRAL Model Law on Electronic Commerce.

[111] Ong, (Spring 2004), 101, 103.

person.[112] Such contracts displayed on a Web site requiring a user to click a button to show acceptance, are generally non-negotiable and often are not read or viewed in their entirety before being accepted, raising the issue of whether there is truly mutual assent by the parties to the terms of the agreement.[113]

Whatever forms of electronic contracting, trust is the basic element between the participants. Within the electronic trade, parties may not have met, or because of the fast speed of online transaction, parties may not have a chance to read terms and conditions of contracts precisely. There is need to establish a certain level of trust, which will in return build up the confidence of customers signing electronic contracts.

Like the UNCITRAL Model Law on Electronic Commerce, the UN Convention employs the "functional equivalence approach" with a view to determining how the purposes or functions of paper-based documents could be fulfilled through electronic commerce techniques.[114] However, the UN Convention does not link the validity of an electronic communication or a contract concluded through electronic means to the use of an electronic signature, as most legal systems do not impose the validity of a contract to a formal signature requirement.[115]

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[112] Murray (2000), 17-35, 19.

[113] Campbell & Berenstein (September 2002), p.3.

[114] Article 9 of the UN Convention.

[115] Report of the Working Group on Electronic Commerce, (A/CN.9/571), p.118.

In the EU, the EC Directive on Electronic Commerce ("E-Commerce Directive") contains three provisions[116] on electronic contracts. The most important of which being the obligation on Member States to ensure that their legal system allows for contracts to be concluded electronically. It can be found in Article 9(1), which in effect, requires Member States to screen their national legislation to eliminate provisions, which might hinder the electronic conclusion of contracts. Many Member States have introduced into their legislation a horizontal provision stipulating that contracts concluded by electronic means have the same legal validity as contracts concluded by more "traditional" means. In particular, as regards requirements in national law according to which contracts have to be concluded "in writing", Member States' transposition legislation clearly states that electronic contracts fulfill such requirement.[117]

In China, the National People's Congress adopted the new Contract Law which recognized electronic contracting in March 1999.[118] The new Contract Law of China (CLC)[119]

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[116] Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on Electronic Commerce), 17.7.2000 *Official Journal of the European Communities* L178/1, Article 9 (Treatment of contracts); Article 10 (Information to be provided); Article 11 (Placing of the order).

[117] REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL AND THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE - First Report on the application of Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce), COM/2003/0702 final.

[118] Zhang & Lei (Winter 2005).

[119] Contract Law of People's Republic of China, adopted and promulgated by the second session of the Ninth National People's Congress on March 15, 1999.

implements several changes in contract formation rules. For example, a contract can now be made in any manner.[120] Under the CLC, writings include agreement, letters, telegram, telex, fax, electronic data information and electronic mail.[121]

2.1.2 What are the obstacles to electronic contracting?

The UN Convention on the Use of Electronic Communications in International Contracts (UN Convention)[122] is the most recent legislation of electronic contracting. The following discussion will examine and analyse the obstacles of forming electronic contracts as identified by the UN Convention.

Firstly, at the national and international level, the directives, model laws and conventions governing electronic commercial transactions do not cover when offers and acceptances of offers become effective for purposes of contract formation.[123] It is still debatable whether the UN Convention should include a provision on when an offer and acceptance in electronic form takes effect, and whether the existing rule of the time of dispatch and receipt of electronic communications will be sufficient to ascertain an offer and acceptance.

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[120] Article 10 of Chinese Contract Law states:

"A contract may be made in a writing, in an oral conversation, as well as in any other form."

[121] Article 11 of Chinese Contract Law.

[122] United Nations Convention on the Use of Electronic Communications in International Contracts, 2005, A/RES/60/21, available at http://daccessdds.un.org/doc/UNDOC/GEN/N05/488/80/PDF/N0548880.pdf?OpenElement (last visited 10 June 2007)

[123] Faria (2006), 689, 691.

If so, how should it be explained, and if not, what should be done about it? We will examine this issue in more details below.

Secondly, the UN Convention does not impose a duty of the availability of contract terms,[124] whilst the EC Directive on Electronic Commerce does.[125] The problem arises because no such obligations existed under the United Nations Convention on Contracts for the International Sale of Goods (CISG) or most international instruments dealing with commercial contracts.[126] The crucial difference between paper-based and electronic contracts is that once a contract is written, if parties keep it safe, it can be stored forever, whilst a contract is concluded by electronic means without the possibility of re-accessing it again or downloading it afterwards, it might be lost forever, therefore, it may become a barrier to evidential proof.

Thirdly, the UN Convention recognizes that it is now possible to conclude a contract by electronic agents without any human intervention. Electronic transactions could take place either between an individual and an electronic agent acting on behalf of an individual, or between two electronic agents acting respectively on behalf of two individuals.[127] The UETA provides that "a contract may be formed by the interaction of electronic agents of

[124] Article 13 of the UN Convention.

[125] Article 10(3) of the EC Directive on Electronic Commerce.

[126] Explanatory Note 2007, p.71.

[127] Ghoshray (Spring 2005), 609, p.619.

the parties, or by the interaction of an electronic agent and an individual."[128] Thus, it can constitute an automated message system.

Automated message systems, sometimes called "electronic agents", refer essentially to a system for automatic negotiation and conclusion of contracts without involvement of a person, at least on one of the ends of the negotiation chain.[129]

To clarify that automated means of communication can convey the intention necessary in contract formation, the UN Convention introduces the use of automated message systems. It provides that a contract shall not be denied validity or enforceability on the sole ground that: when one or both parties have interacted in the contracting process by using an automated message system without review by any person, or when a contract is formed by the interaction of two automatic message systems.[130] This is a non-discrimination rule intended to make it clear that the absence of human review of or intervention in a particular transaction does not by itself preclude contract formation.[131] The Explanatory Note 2007 explains that "Electronic communications that are generated automatically by message systems or computers without direct human intervention should be regarded as 'originating' from the legal entity on behalf of which the message system or computer is

[128] Section 14 of the UETA.

[129] Explanatory Note 2007, p.40.

[130] Article 12 of the UN Convention.

[131] Explanatory Note 2007, p.69.

operated".[132] The EC Directive on Electronic Commerce and the UNCITRAL Model Law on Electronic Commerce lack specific rules on that matter. Although the UN Convention has made a significant recognition of automated message systems, there is a query about whether the rules of automated message system will conflict with the consent requirements of concluding an e-contract, if "consent" between two contracting parties is agreed as a prerequisite of forming a contract.

The fourth obstacle, which connects to the first and the third obstacles above, is error in electronic communication. Article 14 of the Convention addresses a type of error specific to e-commerce, namely data input errors, in view of the potentially higher risk of error in real time or near instantaneous communications made between individuals and automated systems. It deals with the consequences of errors made in interactions between individuals and automated information systems that do not offer the individual an opportunity to review and correct the input error. It requires a party offering goods or services through an automated information system to make available some technical means of identifying and correcting errors. It makes sense that consent may be required prior to the conclusion of automated e-contract system, because meanwhile, it makes time available for error amendments.

The penultimate obstacle is the determination of the location of parties. Unlike the offline

[132] Explanatory Note 2007, p.70.

world where parties have their physical venues, the online business can be located only in space. Therefore, how to determine the location of parties who are doing business online becomes a debated issue. There is no specific provision governing this issue under the directives or model laws on electronic commerce, however, the UN Convention has established a provision in an attempt to remove the uncertainty of determining the location of parties. It is still doubted whether this provision under the UN Convention is sufficient and practical.

Finally, battle of forms, which is the most complicated issue in commercial contracts, raises barriers to offline contracting. Electronic contracts add an even harder element into this dimension. Whether the existing international instruments dealing with battle of forms are adequate to applying to the battle of electronic standard contracts must be examined.

The next section will propose the solutions to the obstacles in electronic contracting as illustrated above.

2.2 Solutions: Formation of Electronic Contracts

2.2.1 The Scenario

The development of electronic commerce signifies that businesses increasingly rely on the Internet to conduct their transactions. Undoubtedly, the computer provides a useful digital platform for traders. The purpose of this section is to examine the formation and

enforceability of electronic contracts. By way of example, the following scenario is considered:

> *A buyer ("B") accesses a computer controlled by a seller ("A") — a laptop merchant — and asks the price of laptops. "B" has never had any dealings with "A" or "A"'s computer before. Having checked that there are laptops in stock, the computer uses knowledge that it has acquired itself to calculate a price by means of a complex formula that it has evolved for itself. The computer then notifies "B" of the price at which it is prepared to sell the laptops. "B" responds by ordering a quantity of laptops to be dispatched to "B", completes the required web form and an appropriate debit to be made from his bank account. "B" also scrolls through part of the agreement (standard terms and conditions) and decides to click on the button to signify their assent to the terms and conditions. "A" never knows that this transaction has occurred. One day later, "A" discovers the pricing error and sends emails and letters to "B"'s web-mail accounts and home addresses notifying him of this error. And the email also states the amendment of the offer. Does the transaction constitute a valid contract? Does "A" have a right to amend the wrong advertisement on the web site after the order has been made?*

The above scenario reflects three doctrines that need to be determined to remove the

obstacles to electronic communications: Firstly, who is contracting? Secondly, when is an electronic contract made? Thirdly, where is the contract made?

2.2.2 Who is contracting?

In the scenario, who are the contracting parties? Are they seller A, buyer B or buyer B's computer? There is no provision governing this substantive issue under the UN Convention. Article 1 of the UN Convention sets the scope that it applies to "parties whose places of business are in different states",[133] but "neither the nationality of the parties nor the civil or commercial character of the parties or of the contract is taken into consideration".[134] Thus, if A and B were contracting in different states ("but it is not necessary for both of those States to be contracting States of the UN Convention"), A and B would be contracting parties under the scope of the UN Convention.[135] The buyer B's Computer cannot be regarded as a contracting party, because it can't be considered as a natural person or legal person. The UN Convention does not directly have a ruling to contracting parties except for article 4 referring to parties as "originators and "addressees". Article 4(d) defines an "originator" as "a party by whom, or on whose behalf, the electronic communication has been sent or generated prior to storage, if any, but it does not include a party acting as an intermediary with respect to that electronic communication." Article 4(e) when determining "addressee" as "a party who is intended by the originator to receive the

[133] Article 1(1) of the UN Convention.

[134] Article 1(2) of the UN Convention.

[135] Explanatory Note: the UN Convention 2007, p.51.

electronic communication, but does not include a party acting as an intermediary with respect to that electronic communication". Thus, buyer B's computer should not be deemed to be a contracting party.

So in the above scenario, how will it be possible to ascertain that the parties (buyer B and seller A) are really who they claim to be?

Under the E-commerce Directive's transparency requirements, commercial communications must be identifiable as such, and the natural or legal person on whose behalf the commercial communication is made must be identified.[136] As used in the UN Convention, the word "parties" includes both natural persons and legal entities.

The difference of recognizing contracting parties between online and offline is the method of identifying the parties. In the online environment, parties might never know and meet each other and there is no written signature in their e-contract.

The increased use of electronic authentication techniques as substitutes for handwritten signatures and other traditional authentication procedures has created a need for a specific legal framework to reduce uncertainty as to the legal effect that may result from the use of

[136] Article 6(b) of E-commerce Directive.

such modern techniques, namely electronic signatures.[137] The UN Convention does not attempt to identify specific technologies equivalent to particular functions of handwritten signatures. Instead, it establishes general conditions under which electronic communications would be regarded as authenticated with sufficient credibility and would be enforceable in the face of signature requirements.[138]

At the same time, the UN Convention does not force parties to accept electronic communication, that is, the parties are free to decide whether or not to use electronic signatures.[139] The concept of "party autonomy" is central to the UN Convention, in which Article 3 allows parties to exclude the application of the Convention as a whole or only to derogate from or vary the effect of any of its provisions. This important principle in contractual negotiations under the UN Convention is consistent with the view of the UNCITRAL. Thus, no party should be compelled to use electronic means in the formation of contracts with regard to offers and acceptances.[140] The explanation given is that a party may lack access to electronic communication or the knowledge to use it or because of receipt or authentication problems. However, party autonomy does not allow the parties to relax statutory requirements on signatures in favour of methods of authentication that provide a lesser degree of reliability than electronic signatures, which is the minimum

[137] Explanatory Note 2007, p.51.

[138] Explanatory Note 2007, p.53.

[139] A/CN.9/527, Report of the Working Group IV (Electronic Commerce) on the work of its fortieth session (Vienna, 14 – 18 October 2002), para. 108 (thereafter, "A/CN.9/527").

[140] Leng (2006), 234, 237.

standard recognized by the UN Convention.[141]

For example, Article 9(3) of the UN Convention is intended to remove obstacles to the use of electronic signatures and does not affect other requirements for the validity of the electronic communication to which the electronic signature relates. According to Article 9(3)(a) of the UN Convention, an electronic signature must be capable of identifying the signatory and indicating the signatory's intention in respect of the information contained in the electronic communication.

Article 9(3)(b) further establishes a flexible approach to the level of security to be achieved by the method of identification used under Article 9(3)(a). The method used under Article 9(3)(a) should be as reliable as is appropriate for the purpose for which the electronic communication is generated or communicated, in the light of all the circumstances, including any relevant agreement.

There are two concerns in relation to Article 9(3): First, is it necessary to require the signatory's "approval" of the information contained in the electronic communication, but not merely the indication of the party's intention? Does the notion of "signature" necessarily imply a party's approval of the entire content of the communication to which the signature is attached? Second, how can one determine that the signature is "as reliable

[141] A/CN.9/527, para. 108.

as appropriate"? What is the "reliability test"?

However, these two obstacles are directly related to the implementation of electronic signature and authentication, which will be discussed in detail in Chapter Five.

2.2.3 When is an electronic contract made?

In the scenario at Section 2.2.1, when was an electronic contract concluded? Was it at the time when B completed the required web form, made a payment by debit card, or clicked "I agree" button to the terms and conditions? Could it be when A received B's order or when A amended the mistakes?

To answer the above question, it is necessary to examine the time of dispatch and receipt of an electronic communication, the rule relating to offer and acceptance and also errors in electronic communications.

2.2.3.1 Dispatch and Receipt of an Electronic Communication

Time of Dispatch

Different legal systems use various criteria to establish when a contract is formed and UNCITRAL favoured 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.[142] Instead, the UN Convention offers 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.[143]

The UN Convention redefines the dispatch and receipt of an electronic communication, which is different from the earlier legislation, UNCITRAL Model Law on Electronic Commerce. Article 10(1) of the UN Convention states that "the time of dispatch of an electronic communication is the time when it leaves an information system under the control of the originator or of the party who sent it on behalf of the originator", whilst Article 15(1) of the UNCITRAL Model Law on Electronic Commerce, consistent with the UETA, defines it as "the time of dispatch of an electronic communication is the time when it enters an information system outside of control of the originator or of the person who sent the data message on behalf of the originator". The definition of "dispatch" in the UN Convention as the time when an electronic communication left an information system under the control of the originator, as distinct from the time when it entered another information system, was chosen so as to mirror more closely the notion of "dispatch" in a non-electronic environment.[144] The redefinition of the time of dispatch of an electronic

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[142] Report of the Working Group on Electronic Commerce on the Work of its 42nd session (Vienna, 17-21 November 2003) (A/CN.9/546), p.103 (thereafter "A/CN.9/546").

[143] Explanatory Note 2007, p.59.

[144] Report of the Working Group on Electronic Commerce, (A/CN.9/571), p.142.

communication is a welcome and timely change that better reflects the realities in today's technological environment.[145] However, the E-commerce Directive lacks provisions defining "the time of dispatch".

The UN Convention is distinct from the ruling of the Model Law on Electronic Commerce and UETA that the dispatch/sent of a data message occurs when it enters an information system outside the control of the originator/sender, or of the person who sent the data message on behalf of the originator/sender.[146] The UETA further provides a more precise explanation of "an information system", namely that the information system can be somewhere designated or used by the recipient.

When applying the above rules to our original scenario, the time of dispatch of electronic communications will occur when buyer B clicks the "I Agree" button to the terms and conditions and sends his order to seller A, after he completes the required web form with payment (i.e. giving credit card details), because when the action is done, buyer B is not in control of his order form any more and the order form enters an information system designated by seller A.

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[145] Wei & Suling (2006), 116, p.137.

[146] Article 15(1) of the Model Law on Electronic Commerce; Section 15(a) of the UETA.

Time of Receipt

As to the time of receipt, the E-commerce Directive (Article 11) stipulates that Member States shall apply the principle that: "the order and acknowledgement of receipt are deemed to be received when the parties to whom they are addressed are able to access them."

The E-commerce Directive is vague on what constitutes "able to access". It fails to explain the meaning of "accessibility".

The UN Convention (Article 9(2)) provides an objective criterion of "accessibility", namely that "Where the law requires that a communication or a contract should be in writing, or provides consequences for the absence of a writing, that requirement is met by an electronic communication if the information contained therein is accessible so as to be usable for subsequent reference." The UN Convention Explanatory Note 2007 explains that the word "accessible" implies that information in the form of computer data should be readable and interpretable,[147] and the word "usable" is intended to cover both human use and computer processing.[148] Keying receipt to a system accessible by the recipient removes the potential for a recipient leaving messages with a server or other service in

[147] Explanatory Note 2007, p.51.

[148] *Ibid.*

order to avoid receipt.[149]

The UN Convention further analyses in depth, that the time of receipt of an electronic communication is the time when it becomes capable of being retrieved by the addressee at an electronic address designated by the addressee.[150] This is presumed to occur when the electronic communication reaches the addressee's electronic address.[151]

This is comparable to Article 15(2) of the Model Law on Electronic Commerce and Section 15(b) of the UETA. The difference is that the UETA provides further detail in that "the electronic record is received when it is a form capable of being processed by that system".[152] Another noticeable difference between the UN Convention and the Model Law on Electronic Commerce as well as the UETA, is that the UN convention does not mention the rules for receipt of electronic communications sent to a non-designated address.

However, none of them cover the issues such as how the sender proves the time of receipt, how the designation of an information system should be made, and whether the addressee could make a change after such a designation. There is also no explanation of what is the meaning of "capable of being retrieved", when the electronic communication is capable of

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[149] Comments of the UETA from the Annual Conference Meeting in its One-hundred and eighth Year in Denvor, Colorado, July 23-30, 1999, p.53.

[150] Article 10(2) of the UN Convention.

[151] *Ibid.*

[152] Article 15(b)(2) of the UETA.

being retrieved, whether "capable of being retrieved" is equivalent to "able to access".

Despite the difference in wording, the effect of the rules on receipt of electronic communication in the UN Convention is consistent with the UNCITRAL Model Law on Electronic Commerce and the UETA. Article 10(2) of the UN Convention further regulates the rule on the time of receipt for the case where an electronic communication reaches the addressee's electronic address, which is presumed to be capable of being retrieved by the addressee at an electronic address designated by the addressee. This provision refers to three considerations to the determination of the time of receipt of an electronic communication as below:

In my opinion, the first consideration is that the accessibility should be defined under the designated address. For example, if A sends B an offer at his home email address which is rarely used for business purposes, it may not be deemed received if B designated his official business email address as the sole address for business purposes. Thus, even though the email is accessible at B's home address, it will not constitute receipt of the electronic communication. Secondly, the retrievability should be distinct from the accessibility. That the electronic communication is accessible does not constitute the presumption that the electronic communication is retrieved. The rationale is that if the originator chooses to ignore the addressee's instructions and sends the electronic communication to an information system other than the designated system, it would not be

reasonable to consider the communication as having been delivered to the addressee until the addressee has actually retrieved it.[153] Thirdly, receipt of an electronic communication at a non-designated electronic address should fulfil two conditions: retrievability and awareness. Namely, receipt at a non-designated electronic address occurs when (a) the electronic communication becomes capable of being retrieved by the addressee and (b) the addressee actually becomes aware that the communication was sent to that particular address.

In addition, the final noteworthy difference is that the E-commerce Directive only covers orders and acknowledgements of receipt, whereas the Model Law on Electronic Commerce and UETA include all electronic records.[154] The scope of the UN Convention is even wider as it embodies all electronic communication, which is made by means of data messages.[155]

2.2.3.2 Offer and Acceptance

One of the most critical questions concerning Internet transactions is whether a contract has been formed. An English case, which is famous as a starting point for the law in this

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[153] Explanatory Note 2007, p.63.

[154] Ramberg (2001), p.3. "Electronic record" means a record created, generated, sent, communicated, received, or stored by electronic means under Section 2(7) of the UETA, whereas, "electronic communication" means any communication that the parties make by means of data messages under Article 4(b) of the UN Convention.

[155] "Data message" means information generated, sent, received or stored by electronic, magnetic, optical or similar means, including, but not limited to, electronic data interchange, electronic mail, telegram, telex or telecopy.

area for further reference in other countries, is *Entores v. Miles Far East Corp*[156]. The leading judgment in the Court of Appeal was given by Lord Denning:

> "His approach was to take as his starting point a very simple form of communication over a distance, that is, two people making a contract by shouting across a river. In this situation, he argued, there would be no contract unless and until the acceptance was heard by the offeror. If, for example, an aeroplane flew overhead just as the acceptor was shouting his or her agreement, so that the offeror could not hear what was being said, there would be no contract. The acceptor would be expected to repeat the acceptance once the noise from the aeroplane had diminished. Taking this as his starting point, he argued by analogy, that the same approach should apply to all contracts made by means of communication which are instantaneous or virtually instantaneous."[157]

The case shows that when the means of communication being used by parties is almost instantaneous, the acceptance rule should prevail over the postal rule. The House of Lords further approved this decision in *Brinkibon Ltd v. Stahag Stahl and*

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[156] [1955] 2 QB 327; [1955] 2 All ER 493, cited from Stone (2005), 52.

[157] Stone (2005), 52.

Stahlwarenhandelsgesellschaft mbH[158]. On this basis, regarding emails or click-wrap contracts as falling into the "instantaneous" category, the acceptance should take place where it was received, rather than where it was sent. However, an email may not be opened as soon as it arrives, and it may be not read until some time after it has been delivered. Thus, it is crucial to determine when the time that the acceptance takes effect. It is suggested that, the contract will be formed at the earliest when the acceptance is received by the offeror's email system, and is available to be read. At the latest, it should be regarded as complete after the passing of reasonable period of time for the acceptance to have been read as expected.[159] With regard to a web agreement, the contract would be made where the offeror had acknowledged to the offeree that his or her offer was accepted, either by means of a direct response on the website or by a subsequent email, which is called the "information duty".

The online contract cannot be binding on the parties until there has been an agreement. The normal analytical tool used to test such a meeting of minds is that of offer and acceptance. Generally, a binding commitment emerges when the offeror has knowledge of the acceptance and when the offeree is similarly apprised of this. However, the rules on offer and acceptance reflect cultural, economic and political ideas about consensual activity. According to contract law a promise with consideration is deemed to bind the parties when

[158] [1983] 2 AC 34, cited from Bainbridge (2008), p.362.

[159] Stone (2005), p.55.

an offer is accepted.[160]

The process of contract negotiation over the Internet is the same as in physical reality: invitation to treat, offer and counter-offer, and final acceptance. The distinction between an invitation to treat and an offer is that an offer, met with acceptance, may form a contract. The distinction does not entitle a website to induce a customer to enter a contract by using misleading statements. If a factual statement prior to a contract being formed is classified as misleading, the induced party may be entitled to claim damages, rescind the contract, or even both.[161]

The UN Convention is silent on offer and acceptance, except for "invitation to make offer".[162] It defines "invitation to make offer" as a proposal to conclude a contract, which is generally accessible to parties making use of information systems, rather than addressed to one or more specific individuals. The difficulty that may arise in this context is how to strike a balance between a trader's possible intention (or lack thereof) of being bound by an offer, on one hand, and the protection of relying on parties acting in good faith, on the other hand.[163] The general principle that offers of goods or services that are accessible to an unlimited number of persons are not binding applies even when the offer is supported

[160] Savirimuthu (2005), 105, p.115.

[161] Gringras (2003), p.24.

[162] Article 11 of the UN Convention on the Use of Electronic Communications in International Contracts.

[163] Explanatory Note 2007, p.66.

by an interactive application.[164] Typically, an "interactive application" is a combination of software and hardware for conveying offers of goods and services in a manner that allows for the parties to exchange information in a structured form with a view to concluding a contract automatically.[165] Article 11 of the UN Convention is not intended to create special rules for contract formation in electronic commerce. Accordingly, a party's intention to be bound would not suffice to constitute an offer in an absence of those other elements, such as the quantity and the price of the goods.[166] With regards to the rule of acceptance, the primary issue should be the question of where the acceptance took effect in the electronic communication environment, if it was sent from one PC to another PC in different locations.

In the EU, the E-Commerce Directive is also silent in offer and acceptance, but it obliges offerees to acknowledge the receipt of an offer (order) "without undue delay and by electronic means".[167] The supplier is entitled first to acknowledge receipt of the offer, and then to accept the offer, according to the rule of "time of acceptance"[168] as we discussed earlier.

In the United States, with regards to the efficiency of offer and acceptance, there is only

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[164] Article 11 of the UN Convention.

[165] Explanatory Note 2007, p.67.

[166] *Ibid*, p.68.

[167] Article 11(1)(a) of the EC Directive on Electronic Commerce.

[168] *Ibid*, Article 11(3).

the UCITA in the United States, which provides that "a contract may be formed in any manner sufficient to show agreement, including offer and acceptance or conduct of both parties or operation of electronic agents which recognizes the existence of a contract"[169]. It also specifies that, in the case of a computer information transaction, "a contract is formed when an electronic acceptance is received".[170] The UETA and E-sign Act are silent on the appropriate rule for the timing of an acceptance.[171] However, Section 14 of UETA validates transactions formed between parties by the interaction of their electronic agents even if they were not aware of the resulting terms or agreements. The section also validates the formation of contracts by interactions between an electronic agent and an individual who voluntarily performs actions with knowledge or reason to know that they will cause the electronic agent to complete performance. ESIGN, whilst generally validating the use of electronic agents[172], does not address these issues. Section 15 of UETA provides that a record is "sent" when it is properly addressed in a form capable of being processed and it enters a system outside that of a sender or system to which the addressee has access, and that a record is "received" when it enters a system designated for receipt of such information in a form capable of being processed. Although the parties may contractually alter this rule, it provides a bright-line default rule. ESIGN is silent on this issue.[173]

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[169] UCITA §202(a) (2001), available at http://www.law.upenn.edu/bll/ulc/ucita/ucita200.htm (last visited on 2nd January 2007).

[170] *Ibid*, §203(4) (2001).

[171] Watnick (Winter 2004), 175, p.197.

[172] ESIGN sec 101(h).

[173] Mckay (July/August 2000).

The UCITA validates electronic contracts by replacing the concept of a "writing" with that of a "record," stating that contracts valued at $5,000 or more are not enforceable unless "the party against which enforcement is sought authenticated a record sufficient to indicate that a contract has been formed and which reasonably identifies the copy or subject matter to which the contract refers."[174] The UETA also imposes a record requirement rather than a writing requirement. Both UCITA and UETA define a "record" as "information that is inscribed on a tangible medium or that is stored in an electronic or other medium and is retrievable in perceivable form" and a "electronic record" as a record that is created, generated, sent, communicated, received, or stored by electronic means.[175] Therefore, both UCITA and UETA broaden the traditional common law writing requirement and clarify the validity and enforceability of certain electronic contracts.

In China, the Contract Law of China (CLC) states that parties may conclude their contract by way of offer and acceptance.[176] Under the CLC, the common law postal rule does not apply. An acceptance is effective at the time when the offeree indicates assent, and it should reach the offeror within the time fixed in the offer.[177] If there is no fixed time in the offer, the offer is deemed to be effective within the reasonable time that offeror should receive the acceptance. But compared with the United Nations Convention on Contracts

[174] UCITA sec 201(a)(1).

[175] UCITA sec 102 (a)(55); UETA sec 2(13).

[176] Article 13 of the Chinese Contract Law.

[177] Article 23 of the Chinese Contract Law.

for The International Sale of Goods, 1980 (CISG), the offer and acceptance rules of the CLC are similar.[178] In contrast to the CLC, China Electronic Signatures Law does not directly regulate the rules of offer and acceptance of electronic contracts. However, article 9 to 12 deal with the sending and receipt of data messages. Article 10 states that if the receiving of any data message needs to be confirmed as prescribed by laws and administrative regulations or the stipulations of the parties, the receipt shall be acknowledged. Article 11 deals with the time the data message is deemed to be sent and received. It states that the time when any data message enters into a certain information system out of the control of the addresser shall be regarded as the time for sending the data message. It further states that where a recipient has designated a specific system to the sender for sending the data message the time at which the data message enters such system shall be deemed to be the time of the receipt of the data message. If no given system is designated, the time when the data message enters into any system of the recipient for the first time shall be regarded as the time for receiving the data message.

In Summary, traditionally, English courts have been in favour of the postal rule, because the Court felt that the acceptance rule might result in each side waiting for confirmation of receipt of the last communication *ad infinitum*.[179] This would not promote business efficacy. Therefore, in order to promote business efficacy, it will be much better if, as soon

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[178] Chen (2001).

[179] *Adams v. Lindsell*, [1818] 1 B & Ald 681; 106 ER 250, cited from Stone (2005), p.49.

as the letter of acceptance was posted, the offeree could proceed on the basis that a contract had been made, and take action accordingly.[180] In the Court's view the conduct of business will in general be better served by giving the offeree certainty.[181] In *Household Fire and Carriage Accident Insurance Co v. Grant*[182], it was held that even if an acceptance was lost and it never arrived at its destination, the contract was still concluded. This is still the rule under English contract law. However, the postal rule itself has limitations. It only applies to acceptance, and not to any other type of communication such as offer or counter-offer.[183] Communication of the offer is required in virtually all situations as the person to whom the offer is addressed must be aware of it.[184] In short, the postal rule was created to provide certainty in contractual formation at a time when the communication system involved unavoidable delays, because the postal stamp enables us to determine easily the time of posting an acceptance.

On the other hand, the postal rule also contains two major disadvantages:

Firstly, the offeror will not be aware of the contract until a few days after the letter of acceptance was posted by the offeree; Secondly, the acceptance letter might never be

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[180] Stone (2005), p.49.

[181] *Adams v. Lindsell*, [1818] 1 B & Ald 681; 106 ER 250, cited from Stone (2005), p.49.

[182] [1879] 4 Ex D 216, cited from Stone (2005), p.51.

[183] Stone (2005), p.50.

[184] *Ibid*, p.48.

received by the offeror, because it might be lost by the post office. This failure of delivery would prevent the offeror to know that a contract had been made.

As noted above, the postal rule states that if the offeree contemplates acceptance by post the acceptance is effective once posted rather than when it is received. It provides the offeree with confidence that an acceptance once posted will be effective, even if the postal system delays delivery of the acceptance beyond the offer date.[185] That is, the contract is deemed to have been concluded at the moment the acceptance is placed into the postal system.[186] The impact of the traditional postal rule on the offer and acceptance process in electronic contracting must be assessed.

In the era of information technology, accepting an offer can be through electronic means. There are some **similarities** between email and post. For instance, dispatching an email is identical to dropping a letter in a red post box. Just like for the sender of a letter, the sender of an email will have no control over it after having pressed the send button, as it will be transmitted to his Internet Service Provider (ISP).

However, an issue which arises when parties are communicating by electronic means is whether an offer can be revoked, or if the offeree can reject an offer once an acceptance

[185] Gardner (1992).

[186] Lloyd (2000), p. 242.

has been sent and when it is received.[187] Some scholars like Prof. Murray, Prof. Walker and Prof. Gloag argue that e-mail and click-warp agreement are different and have to be treated in a different way. They proposed that the postal rule should apply to emails, whilst click-wrap agreements should employ the acceptance rule. In my view, although emails and click-wrap agreements are different, they have something in common that they deliver messages much faster than normal postal mails.

There are, I believe, three major differences between postal mail and electronic communications:

Firstly, although email is not completely instantaneous, it is, unlike postal mail, normally very quick. Sometimes, there are delays, but it is rare and it normally lasts less than a day. Thus, the postal rule loses its traditional function of efficiency in email communications.

Secondly, current software technology makes it possible not only to determine exactly when the acceptance email was sent by the offeree, but also when it was received by the offeror's server. Hence, contractual certainty will be established by proof of receipt.

Thirdly, another point to take into account, which makes email communications different from postal ones is that when the acceptance is sent to the offeror, if no direct reply

[187] Stuckey (2005), §1.02.

follows, under the current software system an automated message with three possible responses may be sent to the offeree: that 1) the message has been received or delivered; that 2) the message has been read; or that 3) the message failed to be delivered. However, the speed at which the packages of information are forwarded along the different routes before they are reassembled at their final destination is more dependant on the workload of the servers and networks they use rather than the geographical distance of the computers. It may therefore be possible to receive a 'return to sender' message in your inbox a few days later.[188] Thus, when the email was sent, it might have never reached the recipients due to technical failures or some other possibilities. There will be a delay between the sending of an acceptance and its coming to the attention of the offeror.[189]

The receipt acknowledgment of email, such as 'your message has been received or delivered', performs on this occasion similar functions as 'recorded delivery' mail, creating again an element of certainty. This will have, unlike the postal rule, the advantage of enabling both parties to know that there is a contract. Thus, taking account of the above features of email, the acceptance rule should prevail over the traditional postal rule in the electronic communication environment. That is, the acceptance takes effect when it reaches the offeror.

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[188] Ong (2004), p.101.

[189] Stone (2005), p.48.

Therefore, it would be convenient and harmonious to apply the acceptance rule to electronic transactions. English courts have already accepted that the postal rule should not be applied where it would lead to "manifest inconvenience or absurdity".[190] This position is also supported in the US Restatement (Second) of Contracts, which provides that acceptance given by telephone or other medium of substantially instantaneous two-way communication is governed by the principles applicable to acceptance where the parties are in the presence of each other.[191] Thus, the acceptance rule, that the acceptance becomes effective when it reaches the offeror, should be applied in electronic contracting, especially click-wrap agreements because it is as instantaneous as face-to-face or oral interactions. The question then arises that whether we should apply the same rule, "the acceptance rule" to email as to "click-wrap" agreement.

If the acceptance rule is applied, then another issue must be answered: "Is there a contract when the acceptance is received by the server or when it is actually received and read by the offeror?"[192]

There are three possibilities applying the acceptance rule in electronic mail communications:

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[190] *Holwell Securities Ltd v. Hughes* [1974] 1 WLR 155 at 161.

[191] Restatement (Second) of Contracts, §64 (1979), cited from Stuckey (2005), §1.02.

[192] Ong (2004), p.101.

Firstly, at the earliest stage, the contract is concluded when the acceptance is received by the offeror and it is available to be read;

Secondly, at the middle stage, the contract will be formed when the acceptance is received by the offeror and is assumed to be read by him within a reasonable time;

Thirdly, at the latest stage, the contract will be established when the acceptance is received and actually read by the offeror.

In relation to click-wrap agreements, the contract will be formed, when the acceptance has been received by the offeror's server. The server then automatically responds to it with an acknowledgement of receipt.

As the outcomes shown above, there is a crossing point between email contracting and click-wrap agreement, that is, the acceptance must be received and the corresponding acknowledgement must be followed. Therefore, we could treat email and click-wrap agreement as the same standard of electronic communications in contracts. Meanwhile, in order to be compatible with the determination of "the time of receipt of electronic communications"[193] in the UN Convention, the uniform rule should be that an electronic

[193] Article 10 of the UN Convention. It provides that "the time of receipt of an electronic communication is the time when it becomes capable of being retrieved by the addressee at an electronic address designated by

contract will be concluded when the acceptance is received and has been retrieved or read by the offeror within a reasonable time. This would be presumed with the evidential automatic message confirming that "the message has been received", "the message has been delivered" or "the message has been read".

If we look back at the above scenario, Party A's advertisement on his web site should be deemed to be an invitation to treat, because it does not specifically target at Party B, but it is instead open to any Party X. When Party B completes the order form and agrees to the standard terms and conditions. Party A's invitation to treat becomes a firm offer. When Party B clicks the button to dispatch his order form, it should be regarded as an acceptance to Party A's offer. The complicated issue raised here is that whether Party B can amend the offer after the acceptance have been received and read, which will be discussed further under the section of errors in electronic communications.

2.2.3.3 Availability of Contract Terms

In contract law, terms become parts of contracts because the parties agree to them. In electronic contracting, parties agree to the terms and conditions (T&C), which are a record of data messages appearing on the PC screen. Sometimes, once you click the "I agree" button, T&C disappear and you cannot get back to them or download them afterwards. Even if you manage to access them or reproduce them afterwards, where standard T&C are

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the addressee."

inalterable, parties asked to "agree" to the terms in some instances will have no easy alternatives other than to submit.[194]

Thus, some legislation requires that the T&C should be available to be downloaded or reprinted afterwards, which aims to enhance legal certainty, transparency and predictability in international transactions concluded by electronic means.[195] However, some legislation is silent on the consequences of the failure to comply with requirements of availability of T&C electronically.

Article 10(1)(b) of the E-Commerce Directive requires that the concluded contract should be filed by the service providers, and it must be accessible. Furthermore, Article 10(3) states that "contract terms and general conditions provided to the recipient must be made available in a way that allows him to store and reproduce them". The E-Commerce Directive does not provide the solution for determining the consequences of a failure to provide the stipulated information.

The UN Convention does not impose any requirement for contracting parties to make available the contractual terms in any particular manner as well as any consequence for failure to perform the duty. Article 13 preserves the application of domestic law that may

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[194] Maxeiner (2003), 109, p.114.

[195] Explanatory Note 2007, p.71.

require a party to make available to the other party the electronic communications containing the contractual terms.[196] Because there are a wide variety of consequences for failure to make the T&C available subject to domestic laws, for example, some might suggest that failure of making the T&C available should constitute an administrative offence and incur a fine, whereas some might give the customer the right to seek an order from the court to enforce the requirement of making the T&C available, or the contract does not enter into force until the time when the merchant has complied with its obligations.[197] Furthermore, the rule of imposing a duty of making the T&C available and its consequence of failure to do so does not exist in the paper-based offline transactions, therefore, international commercial contract legislation did not create any sanctions.[198] It should be left to competition laws or consumer laws to deal with.[199]

In my opinion, electronic communication is fundamentally different from paper-based communication. Electronic evidence is crucial for any possible disputes that might arise later. Under the UN Convention, it is necessary to regulate that the issue of making the T&C available should be compulsory and it can be by means of displaying on the website, downloading from the network, or requesting from merchants. Because the rule of consent is the kind of knowledge that national legal systems require from business partners in order

[196] Wei & Suling (2006), 116, 126-127.

[197] Explanatory Note 2007, p.71.

[198] *Ibid*, p.72.

[199] *Ibid*, p.71-72.

to infer their (explicit or implied) consent on T&C. The principle of mutual consent rules on contract formation in the majority of countries require the modification of T&C to be notified and accepted by counter-parties in order to become part of the contract. Regarding the issue of when such knowledge of T&C shall be gained, the majority of countries require prior knowledge or knowledge at least at the time of contract conclusion[200] of the receipt of the contract or agreement, while the other view is an e-market participant shall in principle be bound by T&C if, at the time of agreement, it was aware or should have been aware of such terms using ordinary care.[201] Thus, the requirements of the availability of contract terms will fulfil the requirements of the awareness of the contract or sale agreement. In electronic contracting, if the availability of contract terms is guaranteed, it will be much more efficient and convenient than offline contracting. For example, when a wholesaler goes to Makro Whole Sale Store to order products and pays them on the till, how often will they check the T&C behind the receipt? Alternatively, if a wholesaler purchased products through Makro's website where the negotiation tool of the T&C was provided, it might be more likely that the wholesaler would read and select the T&C. Thus, T&C in the online circumstances might prevail over T&C in the offline world.

However, there is no need to have a specific provision governing the consequences of

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[200] "Legal Study on Unfair Commercial Practices within B2B e-markets – Final Report", European Commission Study ENTR/04/69, (May 2006), p.73-74.

[201] *Sweeny v. Mulcahy* [1993] ILRM 289, cited from "Legal Study on Unfair Commercial Practices within B2B e-markets – Final Report", European Commission Study ENTR/04/69, (May 2006), p.74.

failure to do so under the UN Convention, because it relates to substantive laws, which lead to different outcomes and are difficult to be uniformed. Thus, it should be dealt with according to domestic laws.

2.2.3.4 Errors in electronic communications

One feature that distinguishes online methods of communication from traditional media is that software now assumes an instrumental role in constituting agreements. If the buyer intends to make a purchase online, he will need to engage with the input data. The software interprets the steps automatically in the negotiations purely on the basis of the clicks made by the buyer. If the buyer does not communicate the range of predicted responses, either the process will cease or a new range of options will be presented for consideration.[202]

As to the input error remedy in electronic communications, Article 14 of the UN Convention applies to a very specific situation that is only concerned with errors that occur in transmissions between a natural person and an automated message system when the system does not provide the person with the possibility to correct the error.[203] The UN Convention further authorises a party who makes an error to withdraw the portion of the electronic communication where the error was made under the conditions of "(a) notifying the other party of the error as soon as possible after having learnt of it, and (b) not having

[202] Savirimuthu (2005), 105, p.126.

[203] Explanatory Note 2007, p.74.

used or received any material benefit of value from the goods or services"[204].

There are four major concerns about mistakes in expression: First, who should be responsible for the mistake and how should the balance be kept between the interest of a mistaken party not to be bound by unintended expressions of promises and the interest of a party relying on a promise to be able to act upon it? Second, how can one know whether it was a mistake but not merely a change of mind? Third, what will be the reasonable time bar for mistake to be discovered and informed? Fourth, what are the conditions for withdrawal or avoidance of electronic communications affected by errors?

Two of the main features of electronic communication are instant and automation. Both of these features increase the risks of making mistakes that cannot be easily corrected before they reach the addressee and before the addressee takes actions in reliance of the mistake.[205] For example, you offered your business partner $20 per product A by email, but immediately you realized that the price had increased in line with inflation, thus you sent another email to inform your business partner that the price had to change to $28 per product A. So will this constitute a valid new offer?

In traditional contract law, once the offer is sent, the contract is formed. In the electronic

[204] Article 14 of the UN Convention.

[205] Ramberg (2001), p.20.

environment, the offer may be amended if the person, or the party on whose behalf that person was acting, notifies the other party of the error as soon as possible after having learned of the error and indicates that he or she made an error in electronic communication.[206] This presumption is based on two conditions: One is the timing – "notifying the other party as soon as possible" and the other is the indication of the error in electronic communication.

These conditions have the effect of limiting the time within which an electronic communication can be withdrawn pursuant to Article 14 of the UN Convention. Under Article 14(1), the right of withdrawal is only available if the notification of the input error is made "as soon as possible" after the party had learnt of the error, and the party "has not used or received any material benefit or value from the goods or services" received.[207] A question arises as to the effect of a withdrawal made pursuant to Article 14. For example, where the erroneous communication formed part of an offer and the automated message system of the other party accepted that offer prior to receiving notice of the withdrawal; under the normal rules of contract formation, a contract would have been formed upon the acceptance. If the withdrawn portion contained some essential term of the contract, what would be the effect of the withdrawal?

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[206] Article 14 of the UN Convention.

[207] A/CN.9/546, p.102-103.

There are two possible effects of the withdrawal. Firstly, the effect of a withdrawal of the erroneous portion could be that the electronic communication is to be regarded as never having contained that erroneous portion. Secondly, the effect of the withdrawal of the erroneous portion could be that the electronic communication is to be regarded as having seen sent with the erroneous portion, which portion was subsequently withdrawn.[208] During the preparation of the UN Convention, it was argued that the remedy should be limited to the correction of an input error, so as to reduce the risk that a party would allege an error as an excuse to withdraw from unfavourable contract.[209]

In my view, "withdrawal" should be included to protect the right of the party when the party has unintentionally hit a wrong key or web button and sent a message that he/she did not intend to send. In the online environment, to recall or replace an error message sometimes can be easier and quicker than in the offline situation. Take Microsoft Outlook as an example:

There is a new function called "recall or replace a message you've already sent"[210] in Microsoft Outlook. If you use a Microsoft Exchange Server e-mail account, you can recall or replace a message if its recipient is logged on and using Microsoft Outlook and has not

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[208] Wei & Suling (2006), 116, 162.

[209] Explanatory Note 2007, p.77 (Sales No.E.07.V.2).

[210] Available at http://office.microsoft.com/en-us/outlook/HP052421841033.aspx?pid=CH062556091033 (last visited 29 May 2007).

read the message or moved it from their Inbox. The method is:

1) In Mail, in the Navigation Pane, click Sent Items.

2) Open the message you want to recall or replace.

3) In the message window, on the Actions menu, click Recall This Message.

Next, do one of the following:

1) Recall the message: Click "Delete" unread copies of this message and select the "Tell me if recall succeeds or fails" for each recipient check box if you want to be notified about the success of the recall or replacement for each recipient.

2) Replace the message: Click "Delete" unread copies and replace with a new message, select the "Tell me if recall succeeds or fails" for each recipient check box if you want to be notified about the success of the recall or replacement for each recipient, click "OK", and then type a new message. To replace a message, you must send a new one. If you do not send the new item, the original message is still recalled.[211]

There are two drawbacks to the above function of recall and replacement: First, this technique is limited, because the feature can only possibly be used if your e-mails are handled by a Microsoft Exchange Server, which is a server that picks up the e-mails for the

[211] *Ibid.*

whole company and then passes them to the right client, so you can't use this feature with your home PC which connects to your e-mail provider directly. Second, the technique is inconsistent with one of the conditions of the rationale behind the error in electronic communications under the UN Convention. Microsoft Outlook requires that a message can be recalled or replaced if its recipient has not read the message or moved it from their Inbox without any time limit, whereas the UN Convention sets the restriction that the person or the representative should notify the other party of the error as soon as possible after having learned of the error, although the UN Convention does not define what is "as soon as possible" itself.

In addition, there are two possible legal effects in recalling and replacing an email: First, it would mean that for example, an offer containing an error in the quantity of goods would be regarded as an offer which never contained any quantity of goods at all. Such an offer would probably not give rise to a valid contract. Second, if the same offer containing an error in the quantity of goods was already accepted, and the erroneous portion was subsequently withdrawn, it would raise a question as to the effect of such a withdrawal on a concluded contract.[212] For example, if a person mistakenly typed "14" when he intended to order just 4 items, the order will not be corrected so as to take effect as an order for 4 items. Under the former scenario, he will instead have the right to withdraw the quantity

[212] Wei & Suling (2006), 116, p.162-163.

"14".[213] However, it is noted that Article 14 only applies to "input errors", that is, errors relating to inputting the wrong data, where "automated message system does not provide the person with an opportunity to correct the error", and not the other kinds of errors such as a misunderstanding of the terms of the contract.[214]

Moreover, the E-commerce Directive obliges websites to provide in a clear, comprehensible and unambiguous manner information about how customers may identify and correct input errors before they place an order.[215] For instance, the E-commerce Directive requires certain procedural information before parties can enter into a contract. To avoid technical problems or mistakes by the contracting parties, the service provider must provide the following information:[216]

- the different technical steps that are to be followed to conclude the contract;
- whether the contract will be filed by the service provider and whether it will be accessible;
- the technical means for identifying and correcting input errors prior to the placing of the order; and

[213] *Ibid*, p.163.

[214] A/CN.9/546, p.188-190.

[215] Article 10 of the EC Directive on Electronic Commerce.

[216] *Ibid.*

- the languages offered for the conclusion of the contract.

So before buyers submit the ordering information, the website should clearly state that their information is to allow the site owner to decide whether to accept their offer. This allows the site owner to check the product type and cost entered and reject, for example, any offer for a television less than £30 as a minimum price for any television. This application of "Backstop" logic reduces the cost of mistakes. There is another leading English case that can be examined as an example, that is, *Brinkibon Ltd v. Stahag Stahl and Stahlwarenhandel GmbH.* It states:

> *"Some error or default at the recipient's end which prevents receipt at the time contemplated and believed in by the sender. No universal rule can cover all such cases; they must be resolved by reference to the intentions of the parties, by sound business practice and in some cases a judgment where the risks should lie."* [217]

In the scenario, if the seller ("A") noticed and corrected the price errors before the order was placed, or before the confirmation of acceptance is made, then it would be deemed to be within the above recommendations. But the difference is that, contracts made over the World Wide Web are rarely completed by two humans: a website operates automatically

[217] [1982] 1 All ER 293, cited from Lloyd (2000), p.242.

according to a set of instructions, often called a script. It leaves no time of two parties to communicate and negotiate with the conditions, although generally, an acceptance must be communicated to the person making the offer. However, any person making any offer may waive the general rule and can instead permit acceptance by conduct.[218]

From my perspective, a promise to pay over the Internet is enough to form the consideration to create a contract. If a click-wrap contract is properly constructed, it seems likely that there is consideration to form a binding contract with the viewer. Thus, it makes sense that in the scenario, the seller ("A") who delayed to notify the price errors (late till the payment has been made) should be responsible to his own negligence, unless he/she can produce the evidence that the errors occurred due to the computer systems.

In addition, the Commission on European Contract Law (also called the Lando-group) presented in 1999 a report called Principles of European Contract Law (PECL). Many other academic groups have followed up on the Lando-commission and drafted articles related to specific contracts. One of the working groups dealing with specific problems in relation to electronic commerce was established in 2003. The task force's aim has been to ascertain that the articles are in harmony with EU Directives on e-commerce and also in harmony with other needs that businesses and consumers may have due to the increased

[218] Gringras (2003), p.28.

use of electronic communication.[219] The report covers six issues, they are, "input errors", "cooling off periods", "unsolicited contracts", "definitions of sent, received and dispatched", "definition of writing" and "definition of signature".[220] In this section, we will only focus on "input errors" and "cooling off periods", which lack precise and uniform rules in both the EC Directive on Electronic Commerce and the UN Convention on Electronic Contracting.

In relation to input errors, Article 11(2) of the EC Directive on Electronic Commerce provides that "Member states shall ensure that, except when otherwise agreed by parties who are not consumers, the service provider makes available to the recipient of the service appropriate, effective and accessible technical means allowing him to identify and correct input errors, prior to the placing of the order." Article 14(1) of the UN Convention, furthermore, states that "where a natural person makes an input error in electronic communication exchanged with the automated message system of another party and the automated message system does not provide the person with an opportunity to correct the error, that person, or the party on whose behalf that person was acting, has the right to withdraw the electronic communication in which the input error was made" under three reasonable conditions,[221] such as prompt notification, return the goods or services receives, as well as un-used, un-received or un-benefited.

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[219] PECL Report (2005), p.4.

[220] *Ibid*, p.2.

[221] Article14(1)(a), (b) & (c) of the UN Convention.

Article 4:103 of the PECL describes the fundamental mistake as to facts or law, which is no need to change. But changes have been suggested to Article 4:104, as follows:

"Article 4:14 Inaccuracy in Communication

(1) An inaccuracy in the expression or transmission of a statement is to be treated as a mistake of the person which made or sent the statement and Article 4:103 applies.

(2) Subject to article 4:103(2), a party concluding a contract at another party's website may avoid the contract for mistake if the other party does not provide effective, accessible and technological means to identify and correct input errors prior to the transmission of a statement.

(3) The parties cannot derogate from paragraph (2) to the detriment of a consumer."[222]

The above principles express clearly on the determination of the errors input. But neither the EC Directive nor the UN Convention defines the time period of errors input correction. With respect to this point, the PECL report further suggests "cooling off periods (right to withdraw)" in details.[223] For example, the new suggested article 2:212(4) expresses clearly that "the consumer must exercise his right to withdraw from the contract within fourteen days after having concluded the contract, having been informed by the seller or

[222] Ecommerce Report (2005), p.8.

[223] *Ibid*, p.9.

service provider of his right to withdraw and the consequences thereof, and having been supplied with any other data prescribed in any relevant regulation by the European Commission. Whether or not the seller or service provider provided such information, the consumer's right to withdraw expires six months after the date of the conclusion of the contract."[224] The efforts of the PECL report made to unify contracts concluded online are to be welcomed, regardless of whether the PECL electronic contract project can eventually succeed. The two uniform principles of "input errors" and "the time period to withdraw" in the report should be highly recommended to electronic commercial transactions at the international legislation level.

2.2.4 Where is the contract made?

With websites and services, the concept of establishment, however, is not so straightforward. Popular websites are hosted simultaneously on many so called duplicating "mirror services". They increase resilience, but they may be situated anywhere on the planet. Consequently, they may be many thousands of miles from the headquarters of those who control them.[225]

Many electronic contracts are not domestic contracts. One of the great successes of the Internet is the creation of a worldwide market place. A trader in Rome can, through a

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[224] *Ibid*, p.17.

[225] Gringras (2003), 16.

webpage, reach a customer in New York just as easily as one in Sorrento, or a multiple establishment, like A's head office is in the UK, but a team based in China handles technical control of the website, customer support and credit card processing is conducted in the USA. So where is the company established? This cross-border impact of the Internet adds a further dimension to electronic contracting, that of international private law, with questions of jurisdiction and choice of law awaiting settlement.[226] That is, the questions will arise which law will govern the transaction and which courts will have jurisdiction in the event of a dispute. In the event that a contract is silent on that point, the location where a contract is concluded will be a major factor in determining the choice of law in question.[227]

As Internet jurisdiction and choice of law can be very complicated issues, the trader may just want to enter into contracts with certain parties from the local region rather than from any country, avoiding the laws of a particular jurisdiction, or the place the contract may be where the offeror is notified of the acceptance of the offer by the offeree, or where the letter of acceptance is posted. Once one has decided when the contract was made, one has also determined where it was made.

In addressing this issue, Article 15 of the Model Law on Electronic Commerce sets out a

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[226] Murray (2000), 17-35.

[227] Lloyd (2000), p.243.

series of criteria for determining where an electronic message is sent and received. It provides that a message is deemed dispatched at the place where the originator has its place of business, and is deemed received at the place where the addressee has its place of business. In the event that either party has more than one place of business, the place of business is the one bearing the closest relationship to the transaction.[228] If a party does not have a place of business, then the party's habitual place of residence is substituted for the place of business.[229]

In the US, the UCITA provides that "a party is located at its place of business if it has one place of business, at its chief executive office if it has more than one place of business, or at its place of incorporation or primary registration if it does not have a physical place of business. Otherwise, a party is located at its primary residence"[230].

In China, Article 12 of the Chinese Electronic Signatures Law deals with the main place of business of the sender and the recipient. It states that the place where the data message is sent or received shall be deemed to be the main place of business of the sender and the recipient. If there is no main business place, the habitual residence shall be the sending or receiving place.

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[228] Article 4(a) of the UNCITRAL Model Law on Electronic Commerce.

[229] *Ibid*, Article 4(b).

[230] Section 109 (d) of the UCITA.

At the international level, the UN Convention provides the determination of the location of the parties (Article 6), which helps to ascertain jurisdiction, applicable law and enforcement. It is its aim to remove legal obstacles to cross-border electronic commerce. It clearly explicates the definition of "place of business", "location of the parties" and "time and place of dispatch and receipt of electronic communications". The Convention proposes "place of business" as "any place maintains a non-transitory establishment to pursue an economic activity other than the temporary provision of goods or services out of a specific location",[231] that is, the place where a party pursues an economic activity through a stable establishment for an indefinite periods. Article 6 of the Convention regulates the rules of "location of the parties". The primary rule is that the parties are taken to be located where they say they are.[232] This is equivalent to "party autonomy". In the absence of a party's indicated location, the place of business is that which has the closest relationship to the relevant contract.[233] In addition, Article 6(3) provides that "If a natural person does not have a place of business, reference is to be made to the person's habitual residence." The UN Convention also clarifies that the location is not merely the place where the equipment and technology located or a domain name is registered.[234]

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[231] Article 4(h) of the UN Convention.

[232] *Ibid*, Article 6(1).

[233] *Ibid*, Article 6(2).

[234] *Ibid*, Article 6(4) & (5).

2.3 Battle of Forms

Businesses generally wish to contract using their own standard conditions of contract, because they may have drafted their contracts to meet their own product, service, project, technical, commercial and legal requirements.[235] It is called a "standard contract". Standard terms are contract terms that one party formulates for use in his contracts generally and provides to other parties for use in their mutual transactions. Typically they are not negotiated but are presented to customers at the conclusion of bargaining over the contract's principle subject matter. Standard terms or general terms are often referred to pejoratively as "boilerplate".[236] The boilerplate terms[237] appear on the reserve side of the contract and are usually ignored until a dispute arises. Parties usually reach contracts for international sales of goods utilizing standard terms. In standard contracts, the party supplying a product or service spells out the terms on which the party does business and which it expects the other party to accept. Sometimes, standard terms designed for use in one country are subject to laws for which they are not designed.[238]

The most crucial issue here is not just the conflict of laws in different countries, but also the determination of whether a contract exists with conflicting terms, whether a particular communication is a rejection of the offer and constitutes a counter-offer, and if the contract

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[235] Bartell (2000), p.208.

[236] Maxeiner (2003), 109, p.110.

[237] "Boilerplate" means general conditions, whilst "front-form" refers to essential or important conditions.

[238] Maxeiner (2003), 109, p.111.

was concluded, what are the terms of the contract. This is so called a "battle of forms". It arises where two companies are in negotiation, and as part of their exchanges they send each standard contract forms, whilst these two sets of forms are incompatible.[239] That is, a battle of forms arises when each party has his/her own standard terms of trading or business that he/she wants to prevail over the other party's standard terms.[240]

The "Battle of Forms" is one of the most complicated issues in traditional contract law, made even more difficult due to the divergent treatment among jurisdiction. In an English leading battle of form case *Butler Machine Tool Co. Ttd. v. Ex-Cell-O Corpn. (England) Ltd*[241], the sellers offered to sell a machine tool to the buyers, the offer being on the standard terms which "shall prevail" over any terms and conditions in the buyers' order and which included a price variation clause for increased costs. The buyers' order form contained standard terms materially different from those of the sellers and stated that the agreed price was fixed. Lord Denning suggested a three-step solution to the battle of forms: first, whether there is an expressed term or implied from conduct of the last form sent; second, whether the offeree's reply materially affects the contract and he fails to draw the offeror's attention; and third, if there is a concluded contract but the forms vary, the forms can be reconciled so as to give a harmonious result whilst the conflicting terms may have

[239] Stone (2005), p.41.

[240] Forte (2006), p.98.

[241] [1979] 1 W. L.R. 401, cited from Rawlings (1979), 715.

to be scrapped and replaced by a reasonable implication.[242] Lord Denning did not agree to find the existence of the contract first. Instead, he preferred to examine whether there is an agreement on material points, and if there is, determine the agreed and conflicted terms.[243] Prof Forte considered that Lord Denning espoused a more radical approach, because it "divorces content from formation and does not produce an inevitable finding that the party who fires the last shot must win".[244]

In order to resolve battle of forms in contracts, the Uniform Commercial Code (UCC), the United Nations Convention on Contracts for the International Sale of Goods (CISG), the International Institute for the Unification of Private Law (UNIDROIT) Principles of International Commercial Contracts (PICC), and the Principles of European Contract Law (PECL) have analysed principles of battle of forms but led to different outcomes.[245] However, the legislations are in common that they follow a "two-stage" process[246], which first attempts to determine whether there is a contract existing between the parties, and then ascertains it by finding whether the exchanged terms materially differ and what terms prevail.

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[242] *Ibid*, p.404-405, cited from Rawlings (1979), 715, p.716-717.

[243] Forte (2006), 98, p.101.

[244] *Ibid*, p.102.

[245] Stemp (Fall 2005), 243, p.244.

[246] Forte (2006), 98, p.102.

2.3.1 UCC

Section 2-207 of UCC[247] states that the contract is concluded even though the acceptance contains additional or different terms. The additional terms of acceptance will become part of the contract, knocking out the terms that materially alter those offered or agreed upon.

The UCC's treatment of battle of forms is far from "uniform". While Section 2-207(1) refers to "additional or different terms", Section 2-207(2) only applies to "additional terms" by providing that "the additional terms are to be construed as proposals for addition to the contract."[248] The Cambridge Online Dictionary defines "different" as "not the same" while explaining "additional" as "extra".[249] The Compact Oxford Online English Dictionary defines "different" as not the same as another or each other" or "distinct and

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[247] UCC Section 2-207 Additional Terms in Acceptance or Confirmation:

(1) A definite and seasonable expression of acceptance or a written confirmation which is sent within a reasonable time operates as an acceptance even through it states terms additional to or different from those offered or agreed upon, unless acceptance is expressly made conditional on assent to the additional or different terms.

(2) The additional terms are to be construed as proposals for addition to the contract. Between merchants such terms become part of the contract unless:

(a) the offer expressly limits acceptance to the terms of the offer;

(b) they materially alter it; or

(c) notification of objection to them has already been given or is given within a reasonable time after notice of them is received.

(3) Conduct by both parties which recognizes the existence of a contract is sufficient to establish a contract for sale although the writings of the parties do not otherwise establish a contract. In such case the terms of the particular contract consist of those terms on which the writings of the parties agree, together with any supplementary terms incorporated under any other provisions of this Act.

[248] Article 2-207(2) of UCC.

[249] Available at http://dictionary.cambridge.org (last visited on 2 August 2007).

separate", whilst it describes "additional" as "added, extra, or supplementary".[250] In my opinion, just like "additional" terms, "different" terms can alter the original terms materially as well. Under these circumstances, the use of the terms "different" and "additional" should be treated the same as "alterations". However, the concept of "different" perhaps permits a much broader range of alterations than the definition of "additional", because whether the offeree or offeror changes some wording of the contract ("different terms") or adds some extra terms and conditions to the contract ("additional terms") has the same effect to the contract: it makes the contract look different.

Section 2-207(1) of the UCC is different from the common law, where a "different" term would create a counter-offer. It mandates that neither "additional" nor "different" terms turn an acceptance into a counter-offer; instead, a contract is formed. Section 2-207(2) accepts that additional terms may become part of the contract except for offer limitations, materially alterations or advanced notifications. Section 2-207(3) applies to "where documentary exchanges between parties do not disclose a concluded contract".[251] Under Section 2-207(3), if the conduct of the buyer and seller is consistent with commercial reality, it is sufficient to establish a contract for sale. Terms are those agreed upon by the agreement, whilst the other conflicting terms are left out, and the other provisions of the

[250] Available at http://www.askoxford.com/dictionaries/?view=uk (last visited on 2 August 2007).

[251] Forte (2006), 98, p.113.

UCC are supplemented.[252]

2.3.2 CISG

Article 19 of CISG[253] provides that a reply to an offer that contains additions, limitations or other modifications constitutes a counter-offer. The default rule under the CISG is to turn a modified acceptance into a counter-offer that rejects the previous offer. Thus, the original contract does not exist if an acceptance contains additions, limitations or other modifications.

However, the reply purports to be an acceptance, and additional and different terms prevail over the terms of offer if they do not materially differ those terms of offer. If this reply is the last document to change hands before performance, its terms will bind the parties.[254] Unlike the UCC Section 2-207, which will find the existence of a contract as long as the

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[252] Torre & Allen (2006), 195, p.202-209.

[253] United Nations Convention on Contracts for the International Sale of Goods (CISG), U.N. Doc. A/COF. 97/18 (Apr. 11, 1980), available at http://www.uncitral.org (last visited 28 September 2007).
Article 19 of CISG states:

(1) A reply to an offer which purports to be an acceptance but contains additions, limitations or other modifications is a rejection of the offer and constitutes a counter-offer.

(2) However, a reply to an offer which purports to be an acceptance but contains additional or different terms which do not materially alter the terms of the offer constitutes an acceptance, unless the offeror, without undue delay, objects orally to the discrepancy or dispatches a notice to that effect. If he does not so object, the terms of the contract are the terms of the offer with the modifications contained in the acceptance.

(3) Additional or different terms relating, among other things, to the price, payment, quality and quantity of the goods, place and time of delivery, extent of one party's liability to the other or the settlement of disputes are considered to alter the terms of the offer materially.

[254] Stemp (Fall 2005), 243, p.261.

major terms match, the CISG will still allow an offeror to reject an acceptance that contains immaterial variations.[255] However, in contrast with the UCC Section 2-207(3), the CISG does not address the question of what happens when conflicting offers and acceptances are exchanged and performance nonetheless begins.[256] The success of the CISG lies in the interpretation of materially altering terms.

2.3.3 PICC and PECL

Differing from the UCC and the CISG, the PICC and PECL separate and treat general conditions conflicts differently from essential terms.[257] Article 2.1.11 and 2.1.22 of the PICC,[258] the same as Article 2:208 and 2:209 of the PECL,[259] discusses rules separately

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[255] Stemp (Fall 2005), 243, p.261.

[256] Del Duca (2005-2006),133, p.146.

[257] Murray (2000), 1, p.41.

[258] UNIDROIT Principles of International Commercial Contracts (1994), 34 I.L.M. 1067 (1995), available at http://www.unidroit.org/english/principles/contracts/principles1994/fulltext.pdf

UNIDROIT Principles of International Commercial Contracts (PICC) Article 2.1.11 states:

(1) A reply to an offer which purports to be an acceptance but contains additions, limitations or other modifications is a rejection of the offer and constitutes a counter-offer.

(2) However, a reply to an offer which purports to be an acceptance but contains additional or different terms which do not materially alter the terms of the offer constitutes an acceptance, unless the offeror without due delay, objects to the discrepancy. If the offeror does not object, the terms of the contract are the terms of the offer with the modifications contained in the acceptance.

UNIDROIT PICC Article 2.1.22 furthermore provides: "Where both parties use standard terms and reach agreement except on those terms, a contract is concluded on the basis of the agreed terms and of any standard terms which are common in substance unless one party clearly indicates in advance, or later and without undue delay informs the other party, that it does not intend to be bound by such a contract."

[259] The Principle of European Contract Law (PECL) Article 2:208 states:

(1) A reply by the offeree which states or implies additional or different terms which would materially alter the terms of the offer is a rejection and a new offer.

(2) A reply which gives a definite assent to an offer operates as an acceptance even if it states or

applying to front-form conflicts (negotiated, essential, or important conditions) and boilerplate conflicts (general conditions).

With regards to conflicting essential terms, both the PICC and PECL are consistent with the CISG employing that a reply to an offer with additions, limitations or other modifications constitutes a counter-offer, which purports to be an acceptance if the additional or different terms in reply does not materially alter the offer. The terms of contract are the terms of the offer with the modifications contained in the acceptance. In relation to conflicting general conditions, both the PICC and PECL recommend that the contract should be concluded by the agreed standard terms that "are common in substance". Thus, the terms of the contract will be formed with the agreed essential terms plus those

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implies additional or different terms, provided these do not materially alter the terms of the offer. The additional or different terms then become part of the contract.

(3) However, such a reply will be treated as a rejection of the offer if:

(a) the offer expressly limits acceptance to the terms of the offer; or

(b) the offeror objects to the additional or different terms without delay; or

(c) the offeree makes its acceptance conditional upon the offeror's assent to the additional or different terms, and the assent does not reach the offeree within a reasonable time.

PECL Article 2:209 provides:

(1) If the parties have reached agreement except that the offer and acceptance refer to conflicting general conditions of contract, a contract is nonetheless formed. The general conditions form part of the contract to the extent that they are common in substances.

(2) However, no contract is formed if one party:

(a) has indicated in advance, explicitly, and not by way of general conditions, that it does not intend to be bound by a contract on the basis of paragraph (1); or (b) without delay, informs the other party that it does not intend to be bound by such contract.

(3) General conditions of contract are terms which have been formulated in advance for an indefinite number of contracts of a certain nature, and which have not been individually negotiated between the parties.

general terms that "are common in substance".[260]

The PICC and PECL attempts to offer both the efficiency and practicality of the CISG that modified acceptances become counter-offers unless the easily noticed modifications are immaterial, while they apply the "common in substance" rule to provide a more equitable treatment when differing terms are likely to go unnoticed.[261] The outcomes of conflicting general conditions are the same referring to Article 2.1.22 of the PICC and Article 2:209 of the PECL. The contract is nonetheless formed because both Article 2.1.22 of the PICC and Article 2:209 of the PECL provide that a contract is concluded despite the existence of conflicting general conditions and the general conditions form part of the contract to the extent that they are common in substances.

As analysed above, in summary, the UCC, CISG, PICC and PECL have their similarities in that material alteration of an offer is a rejection of an offer and constitutes a counter-offer. However, they are different in relation to issue whether a valid contract exists despite the existence of conflicting terms and what terms will apply. The CISG, PICC and PECL, compared with the UCC, are more consistent with the ruling of "different and additional terms". Another merit of the CISG is that it gives the definition of "material alterations", which explicitly express the conditions such as the price, payment, quality and quantity of

[260] Forte (2006), 98, p.117.

[261] Stemp (Fall 2005), 243, p.266.

the goods, place and time of delivery, extent of one party's liability to the other or the settlement of disputes. The PICC and PECL are more comprehensive than the UCC and CISG, because as we discussed earlier, they distinguish the situations between essential terms and general conditions.

2.3.4 How are "battle of forms" resolved in electronic contracts?

However, the battle of forms will be even more complicated in electronic contracts because of the features of instantaneous electronic communications. In electronic contracts, battle of forms will be related to the issues of dispatch and receipt of an electronic communication,[262] validity of offer and acceptance, availability of contract terms,[263] and errors in electronic communications.[264]

When a buyer submits an order on the seller's website, the seller is able to present its standard terms and conditions to the buyer. Then, there are three possibilities: firstly, the buyer can simply accept the standard form, so the contract is concluded with the standard terms of the seller. Secondly, the buyer replies to the seller with a notice of another set of standard terms that are posted at a designated URL (Uniform Resource Locator). For example, the buyer might reply to the seller asserting that "assent is withheld unless the seller assents to the terms and conditions located at

[262] Article 15(1) of the UN Convention.

[263] *Ibid*, Article 13.

[264] *Ibid*, Article 14.

http://www.company.com/terms&conditions.html".[265] Thirdly, the buyer may have no immediate indication of a failed attempt to communicate, and the seller may well only receive a message saying that the email has not been delivered at some time later.[266]

Under the first possibility, it is equivalent to "click-wrap" agreement presenting standard terms. However, the second possibility is the battle of the URLs in the contract. If an acceptance is followed by a separate email or telephone call, the separate email or telephone call should become part of the contract,[267] if it does not materially alter the original contract. If an agreement is only partially integrated, extrinsic evidence of consistent additional terms is admissible.[268]

According to the previous analysis of rules of battle of forms and the above discussion of specific electronic battle of forms, in my view, in electronic contracting, the combination of the ruling of the CISG, PICC and PECL will be practical and appropriate. This means that an electronic acceptance that contains additions, limitations or other modifications is a

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[265] Mootz (2007), 14-18.

[266] Stone (2005), p.53.

[267] Kidd, Jr & Daughtrey, Jr (2000), 215, p.265. Article 11 of the CISG states that "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". Article 1.2 of the PICC provides that "Nothing in these Principles requires a contract, statement or any other act to be made in or evidenced by a particular form. It may be proved by any means, including witnesses". Article 2:101(2) of the PECL provides that "a contract need not be concluded or evidenced in writing nor is it subject to any other requirement as to form. The contract may be proved by any means, including witnesses".

[268] § 216 of the Restatement (second) of Contracts (1981).

rejection of the offer and constitutes a counter-offer. However, if the additional or different terms in the general conditions of the acceptance do not materially alter the offer, they form part of the contract to the extent that they are common in substance, or otherwise parties agree.

2.4 Conclusion and Recommendation

In conclusion, because of the unique features of the Internet, existing regulatory schemes designed to regulate traditional technologies and transactions may not be accurate and sufficiently applicable to electronic contracting. Thus, the solutions will be to either apply existing laws and to interpret them in a way that reflects the complexities of online contracting, or where appropriate, to adopt new regulations or directives to address the development of technology and newly raised disputes. It is worth noting Professor Ramberg's argument that EC Directives are not efficient and they are difficult to reach consensus and harmonization of law because they are not based on a voluntary basis in their implementation, and the tradition of not stipulating the sanctions and effects causes the directives to become implemented differently in the different Member States.[269] In my opinion, new model laws and conventions governing issues of electronic commercial transactions are necessary because they set simple, basic and core principles at the international level, which, in return, is essential to provide uniform legal infrastructure for global electronic commercial transactions.

[269] Ramberg (2001), p.25.

The EC Directive on Electronic Commerce (E-Commerce Directive) and the US Uniform Electronic Transaction Act (UETA) have provided a legal infrastructure to their internal or national electronic commerce markets. At the international level, UNCITRAL Model Law on Electronic Commerce and the UN Convention on the Use of Electronic Communications in International Contracts (the UN Convention) have made great efforts in modernizing and harmonizing online trading laws. They have in common that they employ the principle of functional equivalency for a record or signature in an electronic form. Different from the others, the E-Commerce Directive particularly requires that "the service provider has to acknowledge the receipt of the recipient's order without undue delay and by electronic means".[270] Professor Ramberg argued that there is no need to have a legal requirement of confirmation under the E-Commerce Directive, because there is in law no general rule that a contract be confirmed, and when the contract is already at hand, the confirmation has no legal effect at all.[271] In my view, the ruling of confirmation of the receipt of the recipient's order is necessary, because it will certainly boost the confidence of electronic commercial transactions and give parties the certainty that their corresponding electronic messages have been successfully delivered. However, acknowledgement of receipt is not equivalent to an acceptance, although it might perform a function as an acceptance in click-wrap agreements.

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[270] Article 11 of the EC Directive on Electronic Commerce.

[271] Ramberg (2001), p.14.

The UN Convention is another achievement specialized in electronic contracts after the Model laws on electronic commerce and electronic signatures. It is to enhance legal certainty and commercial predictability of electronic contracting by determining electronic authentication methods, place of business, location of parties, time and place of dispatch and receipt of electronic communications, automated transactions.[272] The UN Convention uniforms the determination of the location of the parties and time and place of dispatch and receipt of electronic communications, where there are various versions of wording in the E-Commerce Directive, the UETA and the UNCITRAL model laws.

The UN Convention is a great success in the above aspects, however, my remaining key criticisms of the UN Convention are fivefold:

Firstly, there is need to define "electronic contracting". When giving the definition, three concepts should be combined: First, electronic communications; Second, automated transactions; Third, data messages.

Secondly, it is necessary to determine when the offer and acceptance takes effect. There is, I believe, no need to distinguish non-instantaneous contracting such as emailing, from instantaneous contracting such as click-wrap agreements, because although it is

[272] The United Nations Convention on the Use of Electronic Communications in International Contracts, (A/60/515).

non-instantaneous contracting by email, it is still much quicker than normal postal services. In addition, using different email servers and different Internet services can vary in speed in sending and receiving messages, as some emails might be almost like instantaneous messages, so it would be more difficult to reach consensus and efficient harmonization of the rule to different standard users and make it fair. Therefore, the "acceptance" or "receipt" rule should be more sensible to apply to electronic contracting.

Thirdly, the UN Convention lacks provisions regulating individual communications of e-contracts, which become a noteworthy issue in electronic transactions. With the increasing highly improvement of IT industry and e-commerce service, online companies can offer the customers a lot more choices when they order products or services online, by pressing different functional buttons and inputting different variations. By suggesting the doctrine of individual communications in concluding an e-contract, the UN Convention should employ "party content before concluding an e-contract" as a condition. It means that it should be compulsory for parties to be aware of communications and for the servers to provide functions for parties to express their contents.

Fourthly, the "technique-neutral" approach should be employed in "errors in electronic communication", because new techniques of amending input errors or wrong messages have been developed dramatically, such as the "recall or replace a message you've already sent" function in Microsoft Exchange Server, which may conflict with the existing rule of

"duty of notification as soon as possible" under the UN Convention.

Lastly, the UN Convention is silent on battle of forms in electronic commercial transactions, which, in my view, is necessary to be included since it will occur more often when more and more large or medium-size firms get involved with e-trading. According to our discussion earlier, the traditional rules contained in the UCC, CISG, PICC and PECL should be combined to apply to online battle of forms, that is, electronic acceptance, which contains additions, limitations or other modifications, is a rejection of the offer and constitutes a counter-offer. However, if the additional or different terms in the general conditions of the acceptance do not materially alter the offer, they form part of the contract to the extent that they are common in substance, or otherwise parties agree.

From the comparative legislation study in this chapter, it seems that the US is attempting to drive the international marketplace into the Internet age, while the EU approach appears to be more focused on growing the internal marketplace. China, as the second largest Internet users' country, has been learning from the western legislative experience and establishing new laws to adapt to the online market, although there are still additional areas to cover, especially issues regarding electronic cross-border jurisdiction. However, China, along with the rest of the international community is searching for a harmonious global solution. Nevertheless, regulation, model law or convention should be minimal, clear and simple,

and predicable and consistent.[273] But we need to bear in mind that the process of modernisation and harmonization of the performance of e-contracts and choice of laws through an international instrument is lengthy and arduous and involves the infusion of a prodigious amount of expertise, time and money.

With regard to the adjudication of the electronic contracts, Chapter Six will continue the analysis of different methods of disputes resolutions such as Alternative Dispute Resolutions (ADR) and Online Dispute Resolutions (ODR).

[273] Papas, C. W. (2002).

3. Chapter Three

Jurisdiction in E-Contracting

3.1 Introduction

As discussed in Chapter Two, any computer, anywhere in the world, connected to the Internet can access a website. Businesses, through the use of the Internet, can enter into electronic contracts with other businesses located in different countries. The potential for cross-border disputes in electronic contracts is, obviously, much greater than in paper-based environment where a high degree of commercial contracts are domestic in nature. Businesses fear that such online contracts may not be enforceable in a court of law or even how to solve the problem of jurisdiction because unlike paper based contracts, online contracting is not executed in one particular place. Therefore, issues of private international law arise.[274]

3.1.1 Definitions and Principles

The conflicts of law or private international law is the body of law that aspires to provide solutions to international or interstate legal disputes between persons or entities other than countries or states as such. "Conflict of Laws" is the term primarily used in the United States, Canada and more recently in England, while "Private International Law" is the term used in continental countries, and by some writers in England.[275]

International jurisdiction occurs when a dispute is international (for example, because the

[274] Murray (2000), 17-35, p.32.

[275] Scoles, Hay, Borchers & Symeonides (2000), p.1-2.

parties are of different nationalities or do not reside in the same country), several courts may have jurisdiction in the same case. The rules of international jurisdiction determine the country whose courts are competent to adjudicate in a given dispute.[276]

Applicable law or choice of law is to determine which of the laws involved govern the situation, when a legal relationship between private individuals has an international character (for example, a contract was made with a foreign company or was to be performed in a foreign country). The applicable law is determined by the conflict rules.[277] In short, while jurisdiction is concerned with the adjudicative process, choice of law is concerned with the substantive law.

As seen from the above terminology, the subject of conflict of laws deals with the resolution of disputes involving foreign elements.[278] It can be divided into three parts. The first covers jurisdiction: where can or should litigation be initiated? The second is choice of law: Which law will the court apply? The third deals with the recognition and enforcement of foreign judgments: where can the resulting judgment be enforced?

3.1.2 Differences between Common Law and Civil Law Systems

The understanding of conflict of laws is different between civil law and common law

[276] Green Paper (2002), Annex 1.

[277] *Ibid.*

[278] Yeo (2004), p.1.

systems. In civil law systems, private international law deals primarily with choice of law problems, although, for historical and other reasons, it often encompasses the law of nationality and citizenship as well as rules regulating the condition of aliens. The law to be applied to a case ordinarily has little to do with a court's jurisdiction, except coincidentally, as in cases dealing with local land or immovable. In common law systems, jurisdiction and applicable law are also distinct, but as a practical matter they are often intertwined, especially in recent developments, choice-of-law theories in the US favour the application of the local law.[279] Furthermore, the common law uses "domicile" as a personal connecting factor, the civil law tradition prefers nationality.[280] Under the common law, the court decides a new case according to the former decision, while under the civil law former decisions do not affect current decisions, which enables judges to have different views applying written laws or rules to a particular case. Moreover, *forum non conveniens* is applied in the common law countries. Generally, *forum non conveniens* allows a court to have jurisdiction to stay (suspend) or dismiss the proceedings if another court would be a more appropriate forum, that is, the court could exercise its discretionary power to grant a stay or dismissal of jurisdiction depending on all relevant facts in a particular case.[281] Thus, in the common law system, courts have discretionary powers, which allow judges to decide to take certain e-commerce cases and to exercise the power of judicial review.

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[279] Scoles, Hay, Borchers & Symeonides (2000), p.4.

[280] Morris, McClean & Beevers (2005), p.4.

[281] Hartley & Dogauchi (2007), p.45.

3.1.3 Characteristics of Internet Jurisdiction

Questions regarding appropriate jurisdiction arise with every cross-border e-commerce transaction.[282] Nations want to be able to ensure the protection of local businesses, however, jurisdiction over e-commerce transactions is special in effecting this protection.[283]

The problem is that whereas sellers would not want to be sued abroad, buyers would prefer to seek solutions in their own places. If the relevant action is not taken, then the lack of this uniformity means that e-business companies face the possibility of being subject to any foreign legal jurisdictions in which their web sites can be accessed.[284] In practice, the most effective way to resolve Internet private international law problems is to use choice of law and choice of jurisdiction clauses in electronic contracts as a means of agreeing to a common choice of law, rather than leaving it to the uncertainties of geographically-oriented choice of law regimes. However, most of the cases are not so straightforward.

There are no specific rules in the model laws and conventions dealing with Internet jurisdiction. The UNCITRAL Model Law on Electronic Commerce and the UN Convention on the Use of Electronic Communications in International Contracts (the UN

[282] Aciman & Vo-Verde (2002).

[283] Geist (2001).

[284] Chen (Spring 2004), p.423.

Convention) do not contain any jurisdiction provisions. They determine the time and place of dispatch and receipt of data messages or electronic communication[285] and the location of the parties,[286] giving the connecting factors such as "the place of business", "the closest relationship to the relevant contract, the underlying transaction or the principal place of business", or "habitual residence", which may help to analyse the parties' business location to ascertain jurisdiction.

This chapter will discuss the success of the Convention on Choice of Law Agreements,[287] analyse the EU and US approaches for determining jurisdiction in e-contracting cases, explain the differences in between, and conjointly, consider how the common-law system affects the civil-law system with regards Internet jurisdiction in China, and finally conclude that whether there is need to propose specific jurisdiction rules for online contracts or whether they can simply apply the general jurisdiction rules that are used in ordinary contracts.

3.2 Choice of Court Agreements

The draft Hague Convention on Jurisdiction and Foreign Judgments in Civil and

[285] Article 15 of the UNCITRAL Model Law on Electronic Commerce, on the report of the Sixth Committee (A/51/628) 16 DECEMBER 1996, available at www.lexmercatoria.org (last visited 16 August 2007); and Article 10 of the UN Conventions on the Use of Electronic Communications in International Contracts (the UN Convention), 2005, available at www.uncitral.org (last visited 16 August 2007).

[286] Article 6 of the UN Convention.

[287] Convention on Choice of Court Agreements, concluded June 30, 2005, available at www.hcch.net/index_en.php?act=conventions.text&cid=98 (last visited 16 Jan 2006).

Commercial Matters was comprehensive but too controversial, thus, after years of debate, the Hague Conference proposed that the Convention be scaled down to address only choice of court agreements between businesses, leaving many of the broader jurisdictional and enforcement provisions on the cutting room floor.[288] On 30 June 2005, all of the member states approved it as the Hague Convention on Choice of Court Agreements[289] (hereafter called "Choice of Court Convention"). The Hague Convention on Choice of Court Agreements aspires to be parallel to the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards (1958) ("New York Convention"). The expectation is that if an equally broadly accepted convention exists with respect to choice of court agreements, business parties will have an alternative to choosing arbitration in their contracts.[290] This session is firstly, to discuss the aim and scope of the Convention; secondly, to analysis its core principles and thirdly, to recommend signing and ratifying the Convention.

3.2.1 Scope

The Choice of Court Convention lays down uniform rules for the enforcement of international choice of court clauses.[291] With the aim to "promote international trade and

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[288] Dogauchi & Hartley (2004).

[289] Convention on Choice of Court Agreements, concluded June 30, 2005, available at www.hcch.net/index_en.php?act=conventions.text&cid=98 (last visited 16 Jan 2006).

[290] McEleavy (ed.) (April 2006), 447.

[291] Recent International Agreement (January 2006), 931.

investment through enhanced judicial co-operation,"[292] the Convention applies solely to "international cases of exclusive choice of court agreements concluded in civil or commercial matters".[293] It applies only to business-to-business transactions.[294] The "international" feature of the Convention strongly supports global cross-bordered electronic transactions.

Recognition and application of choice of court clauses concluded electronically can be found in another two articles of the Choice of Court Convention. As Article 3(c) expressly states, an exclusive choice of court agreement must be concluded or documented "in writing; or by any other means of communication, which renders information accessible so as to be usable for subsequent reference." The wording of this provision was inspired by Article 6(1) of the UNCITRAL Model Law on Electronic Commerce 1996. The terminology "by any other means of communication" should be deemed to include any electronic means, although this article could be made clearer by providing that "any communication by electronic means which provides a durable record of the agreement shall be equivalent to 'writing'".[295] Another provision of the UN Convention, which

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[292] Paragraph 1 of the Convention on Choice of Court Agreements.

[293] *Ibid*, Article 1(1).

[294] *Ibid*, Article 2(1).

[295] Article 23(2) of the Council Regulation on Jurisdiction and the Recognition and Enforcement of Judgments in Civil and Commercial Matter ("Brussels I Regulation"), see Council Regulation (EC) No. 44/2001, 22 December 2000, *Official Journal L 012, 16.01.2001*, p.1, available at http://europa.eu.int/eur-lex/pri/en/oj/dat/2001/l_012/l_01220010116en00010023.pdf (last visited on 13 November 2005).

implies the consideration of electronic communications, is Article 13. Article 13 (1)(b) provides that "the party seeking recognition or applying for enforcement shall produce the exclusive choice of court agreement, a certified copy thereof, or other evidence of its existence". The wording of "or other evidence of its existence" was included mainly for agreements concluded electronically.[296]

The definition of "exclusive choice of court agreement" in the Choice of Court Convention, laid down in Article 3, provides that "a) exclusive choice of court means an agreement concluded by two or more parties that meets the requirements of paragraph c) and designates, for the purpose of deciding disputes which have arisen or may arise in connection with a particular legal relationship, the courts of one Contracting State or one or more specific courts of on Contracting State to the exclusion of the jurisdiction of any other courts; b) a choice of court agreement which designates the courts of one Contracting State or one or more specific courts of one Contracting State shall be deemed to be exclusive unless the parties have expressly provided otherwise". This article provides that the Choice of Court Convention only applies to choice of court agreements in favour of Contracting States, which can apply to both past and future disputes.[297] It contains five requirements: firstly, the agreement between two or more parties must exit; secondly, the form requirement must be satisfied; thirdly, the agreement must designate courts of one

[296] Hartley & Dogauchi (2007), p.62.

[297] *Ibid*, p.24.

state, or one or more specific courts in one State excluding all other courts; fourthly, the designated court or courts must be in a Contracting State; and finally, the designated courts must be connected to a particular legal relationship.[298]

In accordance with the above five requirements, there are three possibilities defining exclusive choice of court agreements: it can refer to the courts of a Contracting State (i.e. the courts of the United States); it can refer to a specific court in a Contracting State (i.e. the Federal District Court of California); and it can also refer to two or more specific courts in the same Contracting State (i.e. either the Federal District Court of California or the Federal District Court of New York). However, if two courts in different States were selected, for example, the courts of the United States and the courts of the United Kingdom, the choice of court agreement would not be considered exclusive under the Choice of Court Convention.[299]

The Convention sets out four basic rules: First, the chosen court must hear the case when proceedings are brought before it,[300] that is, a court designated in an exclusive choice of court agreement "shall not decline to exercise jurisdiction on the ground that the dispute should be decided in a court of another state."[301] Second, any court not designated in the

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[298] *Ibid*, p.38-39.

[299] *Ibid*, p.40.

[300] *Ibid*, p.22.

[301] Article 5(2) of the Convention on Choice of Court Agreement.

exclusive forum selection agreement must refuse jurisdiction.[302] Third, state parties must recognize and enforce judgments resulting from an exclusive choice of court agreement.[303] Fourth, optional provision allows states to declare that they will recognize and enforce judgments rendered by courts of other contracting states designated in non-exclusive choice of court agreements.[304]

3.2.2 Core Principles

The Choice of Court Convention deals with the courts in cases of choice and in absence of choice. For instance, while Article 5 of the Convention on Choice of Court agreements serves to tell the chosen court how to respond to an exclusive choice of court agreement, Article 6 provides the rule applicable in courts that are not chosen.

Jurisdiction of the chosen court

Article 5 sets out the basic rule that the court chosen by the parties in an exclusive choice of court "shall have jurisdiction". Article 5(1) states that "the courts of a Contracting State designated in an exclusive choice of court agreement shall have jurisdiction to decide a dispute to which the agreement applies, unless the agreement is ***null and void*** under the law of that state". The "null and void" is the only condition to exempt the rule that the chosen court must hear the case. The question whether the agreement is null and void is

[302] *Ibid*, Article 6.

[303] *Ibid*, Article 8.

[304] *Ibid*, Article 22.

determined under the law of the state of the chosen court. It only applies to substantive grounds of invalidity such as fraud, mistake, misrepresentation, duress and lack of capacity.[305]

Article 5(2) reinforces the obligation laid down in Article 5(1), providing that "a court that has jurisdiction under paragraph 1 shall not decline to exercise jurisdiction on the ground that the dispute should be decided in a court of another State". "A court of another State" in Article 5(2) should be deemed to be a court of another territorial unit where appropriate.[306] It means that if the parties choose "the courts of England", "the courts of Scotland" have no jurisdiction because England will be regarded as the relevant territorial unit whilst Scotland will be another "State" for this purpose. However, if the parties choose "the courts of the United Kingdom", both "the courts of England" and "the courts of Scotland" can hear the case because "State" here refers to the United Kingdom.[307]

Furthermore, Article 5(3) provides that "the proceeding paragraphs shall not affect rules: a) on jurisdiction related to subject matter or to the value of the claim; b) on the internal allocation of jurisdiction among the courts of a Contracting State. However, where the chosen court has discretion as to whether to transfer a case, due to consideration should be given to the choice of parties". This article does make clear that the Convention rules

[305] Hartley & Dogauchi (2007), p.44.

[306] *Ibid.*

[307] *Ibid.*

govern only in international jurisdiction, and the private parties cannot create a subject matter jurisdiction that does not otherwise exist in a national legal system. Also, the Convention states clearly the rules on internal allocation of jurisdiction in Contracting States. The jurisdiction related to subject matter or the value of the claim cannot be affected by a choice of court agreement. So what will happen if parties conclude a choice of court agreement in favour of a family court, while their dispute relates to an international sale? A specialized family court would lack subject-matter jurisdiction to hear an action of breach of contract, thus even if the parties designated such a court, it would not be forced by the Convention to hear the case.[308]

Obligation of a court not chosen

Article 6 expresses that "[a] court in a Contracting State other than that of the chosen court shall suspend or dismiss proceedings to which an exclusive choice of court agreement applies" unless one of the five following expectation occurs: "1) null and void agreement under the law of the chosen court; 2) party incapacity; 3) manifest injustice or manifestly contrary to public policy; 4) uncontrollable factors; and 5) declined of the chosen court".

Three conditions are contained in Article 6: firstly, the choice of court agreement must be exclusive; secondly, the chosen court must be in a Contracting State; and lastly, the parties

[308] McEleavy (ed.) (April 2006), 447, p.451.

to the proceedings must be bound by the choice of court agreement.[309] Assume that A, who is resident in California, sells goods to B, who is resident in London. B then resells goods to C who is resident in Shanghai. The contract between A and B contains a choice of court clause in favour of the courts of California, whilst the contract between B and C contains no choice of court clause. Under these circumstances, B can sue A in California if necessary. C can sue B and A at the same time in London if disputes arise, because there is no choice of court agreement between A and C. But if C only sues B in London, B won't be able to join A as a third party, because the choice of court agreement is only binding between A and B.[310] If so, subject to Article 6 of the Choice of Court Convention, the court in London have to suspend or dismiss any proceedings that A brings again B. The "null and void" rule is the reverse side of the exception to the obligation of the chosen court to assume jurisdiction in Article 5(1). If indeed the chosen court is not obliged to assume jurisdiction, then other courts should not be obliged to decline jurisdiction.[311] Thus, Article 6 is established for the purpose of ensuring that "the court seized and the chosen court give consistent judgments on the validity of the choice of court agreements".[312]

3.2.3 Signatory, Ratification and Implementation

One of the difficulties of applying this Choice of Court Convention is due to the different

[309] Hartley & Dogauchi (2007), p.47.

[310] *Ibid.*

[311] MeEleavy (ed.) (April 2006), 447, p.451.

[312] Hartley & Dogauchi (2007), p.48.

legal culture in different states. For example, in the stricter civil law system, the court first seized hears the case while courts later seized decline to hear it.[313] A choice of court agreement is presumed to be exclusive in some States, but non-exclusive in others. In the EU, if a clause between a party domiciled in New York and a party domiciled in Germany stating "(a) The High Court in London shall have jurisdiction over any dispute arising under this contract", or "(b) The High Court in London shall have exclusive jurisdiction to adjudicate any dispute arising under this contract", it will have the result that German Court will decline jurisdiction.[314] In contrast, in the US, the above neutrally clause (a) will generally be regarded as non-exclusive. Thus if one of the parties brings an action in a US court, that court might examine its jurisdiction. It will not necessarily decline jurisdiction merely because the forum clause appointed a court in London.

One of the crucial merits of the Choice of Court Convention is that it clearly expresses its relationship with other international instruments. As explained in the Explanatory Report 2007:

> "If there is a conflict of rules with regard to jurisdiction, the Brussels Regulation will prevail over the Convention where none of the parties is

[313] Article 4(1) of the Convention between Belgium and France on Jurisdiction and the Validity and Enforcement of Judgment Arbitration Awards and Authentic Instruments (Paris 1899) and Article 6(1) of the Convention between Belgium and the Netherlands on Jurisdiction, Bankruptcy, and the Validity and Enforcement of Judgements, Arbitration Awards and Authentic Instruments (Brussels 1925), cited from McEleavy (ed.) (April 2006), 447, p.448.

[314] Article 23 (1) of the Brussels Regulation.

resident in a Contracting State that is not a Member of the European Community. Where one or more of the parties is resident in a Contracting State that is not a Member State of the European Community, the Convention will prevail."[315]

Thus, for example, if an American company and a German company choose the Rotterdam district court, the Choice of Court Convention will prevail, whilst if a French company and a German company choose the Rotterdam district court, the Brussels I Regulation will prevail.[316]

Furthermore, the success of the Choice of Court Convention will depend on whether the big economic players of the world such as the European Union, the United States and China will sign and ratify it.[317] The European Community (EC) recommended that the Choice of Court Convention would benefit European Business as an important instrument and a strategic alternative, which "has the potential to accomplish for court judgments what the United Nations Convention of 10 June 1958 on the Recognition and Enforcement of Foreign Arbitral Awards does for arbitral awards".[318] In the United States, the American

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[315] Hartley & Dogauchi (2007), p.25-26.

[316] *Ibid*, p.27.

[317] Kruger (2006), 447, p.455.

[318] Examination By the European Community of Existing Hague Conventions – Note drawn up by the Secretary General of the Hague Conference on Private International Law, p.6, available at http://www.hcch.net/upload/wop/genaff_note-ec.pdf (last visited 19 August 2007).

Bar Association also urges the government to sign, ratify and implement the Choice of Court Convention for the reasons that it would make contracting parties more willing to designate litigation instead of arbitration, and meet the need in transnational transactions for enforceable choice of court agreements.[319] So can China sign and ratify the Choice of Court Convention? It is suggested that as far as the core subject matters covered by the Choice of Court Convention are consistent with ones under the Chinese Civil Procedure Law, as well as the formal requirements of an exclusive choice of court agreement in the Choice of Court Convention are compatible with Chinese laws, China can sign and ratify the convention.[320] However, at the same time, China can make declarations to exclude or condition some specific matters in its domestic law where conflicts arise.

3.3 Other Jurisdiction Rules

3.3.1 EU Rules Applied in Cyber Jurisdiction

In the EU, the EC Directive on Electronic Commerce neither establishes additional rules on private international law nor deals with the jurisdiction of courts.[321] Since the E-commerce Directive does not cover Internet jurisdiction, the Brussels I Regulation,[322]

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[319] Recommendation, August 7-8, 2006, the American Bar Association urges the United States government promptly to sign, ratify and implement the Hague Convention on Choice of Court Agreements, adopted by the House of Delegates, available at http://abanet.org/intlaw/policy/investment/hcca0806.pdf (last visited 19 August 2007).

[320] Tu (Spring 2007), 347.

[321] Recital 23 and Article 1(4) of the EC Directive on Electronic Commerce

[322] Council Regulation on Jurisdiction and the Recognition and Enforcement of Judgments in Civil and Commercial Matter ("Brussels I Regulation"), see Council Regulation (EC) No. 44/2001, 22 December 2000,

which is based on the old Brussels Convention, performs its role in the absence of the relevant legislations. Whereas the Brussels Convention[323] had to be incorporated into domestic law by national legislation, the Brussels I Regulation is directly applicable throughout the participating member states. Moreover, the Brussels I Regulation applies in the new member states as part of the *acquis communautaire*,[324] thus the Brussels I Regulation extended to the ten new EC member states[325] on their accession in 2004,[326] and two EC member states in 2006.[327]

Article 23(2) of the Brussels I Regulation is the only rule that explicitly acknowledges agreements with electronic means, stating that "any communication by electronic means which provides a durable record of, the agreement shall be equivalent to writing". It means that a contract stored in a computer as a secured word document (i.e. a read-only document or document with entry password), or concluded by email and click-wrap agreement falls within the scope of Article 23(2) of the Brussels I Regulation.

Official Journal L 012, 16.01.2001, p.1, available at http://europa.eu.int/eur-lex/pri/en/oj/dat/2001/l_012/l_01220010116en00010023.pdf (last visited on 13 November 2005).

[323] 1968 Brussels Convention on jurisdiction and the enforcement of judgments in civil and commercial matters (consolidated version), *Official Journal C 027, 26/01/1998 P. 0001 – 0027*, http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:41998A0126:EN:HTML (last visited on 13 November 2005).

[324] Hill (2005), p.51.

[325] Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, from 01/07/2007 the same rule applies to Denmark as well.

[326] Annex II of the Treaty of Accession sets out a number of technical amendments to the Brussels I Reg: [2003] OJ L/12/1.

[327] Bulgaria and Romania, Council Regulation (EC) No 1791/2006 of 20 November 2006, OJ 20/12/2006.

The Brussels I Regulation only applies "in civil and commercial matters".[328] It is further provided that four matters – family law, bankruptcy and insolvency, social security and arbitration[329], are excluded from the regime's scope. There are three types of jurisdiction in the Brussels I Regulation: general jurisdiction, special jurisdiction and exclusive jurisdiction. The Brussels I Regulation contains the general jurisdiction rule that defendants who domiciled in one of the Contracting states shall be sued at the place of their domiciles.[330] One of the key objectives of the Brussels Regime is the harmonization of jurisdictional bases in cases involving proceedings brought against defendants domiciled in the states concerned.[331]

3.3.1.1 Choice of Court Clauses

Article 23 of the Brussels Regulation provides:

> "1. If the parties, one or more of whom is domiciled in a Member State, have agreed that a court or the courts of a Member State are to have jurisdiction to settle any disputes which have arisen or which may arise in connection with a particular legal relationship, that court or those courts shall have jurisdiction. Such jurisdiction shall be exclusive unless the parties have agreed otherwise. Such an agreement conferring jurisdiction shall be either: (a) in writing or

[328] Article 1(1) of the Brussels I Regulation.

[329] *Ibid*, Article 1(2).

[330] *Ibid*, Article 2.

[331] Hill (2005), p.71.

evidenced in writing; or (b) in a form which accords with practices which the parties have established between themselves; or (c) in international trade or commerce, in a form which accords with a usage of which the parties are or ought to have been aware and which in such trade or commerce is widely known to, and regularly observed by, parties to contracts of the type involved in the particular trade or commerce concerned.

2. Any communication by electronic means which provides a durable record of the agreement shall be equivalent to "writing".

3. Where such an agreement is concluded by parties, none of whom is domiciled in a Member State, the courts of other Member States shall have no jurisdiction over their disputes unless the court or courts chosen have declined jurisdiction.

4. The court or courts of a Member State on which a trust instrument has conferred jurisdiction shall have exclusive jurisdiction in any proceedings brought against a settler, trustee or beneficiary, if relations between these persons or their rights or obligations under the trust are involved.

5. Agreements or provisions of a trust instrument conferring jurisdiction shall have no legal force if they are contrary to Articles 13, 17 or 21, or if the courts whose jurisdiction they purport to exclude have exclusive jurisdiction by virtue of Article 22."

Any well-drafted contract, which has factual links with more than one country, will contain a choice of jurisdiction or court clause. This is often referred to as an "exclusive" clause, providing that all disputes between the parties arising out of the contract must be referred to a named court or the courts of a named country.[332] Article 23 authorises parties to enter into an agreement designating the court or courts to determine such disputes. However, Article 23(1) applies when at least the party, one or more of whom, is domiciled in a member state, have agreed that the courts of a member state are to have jurisdiction over disputes arising in connection with a particular legal relationship. Parties can choose courts or specific courts of a country. For example, Company A (in Italy) and Company B (in Germany) have agreed a jurisdiction clause "disputes must be referred to the courts of Germany" in their electronic contracts of sale. Under these circumstances, German courts are designated to have jurisdiction over A and B's disputes. However, if later on, A and B made another distribution contract without jurisdiction clause (the sales contracts and the distribution agreement are different legal relationships), then the original jurisdiction clause in the sale contract does not confer jurisdiction with regard to a dispute arising under the distribution contract.[333] If the jurisdiction clause includes a choice of a particular court, Article 23 is to confer jurisdiction on that court, but not on other courts in the same country. However, A and B can also choose the other courts, for instance the French court, instead of the Italian or German courts to hear the case, because Article 23 does not

[332] Morris, McClean & Beevers (2005), p.87.

[333] *WH Martin Ltd v. Feldbinder Spezialfahzeugwerke GmbH* [1998] ILPr 794, cited from Hill(2005), p.103.

"require any objective connection between the parties or the subject matter of the dispute and the territory of the court chosen".[334] Moreover, A and B can also conclude a further exclusive jurisdiction agreement varying the earlier agreement, because Article 23 is based on the principle of party autonomy and it does not prevent parties from changing their decisions.[335]

However, Article 23(3) includes an exemption to parties, none of whom is domiciled in a member state. In this situation, the chosen courts have discretion to determine the existence and exercise of their jurisdiction in accordance with their own law.[336] The courts of the other members shall have no jurisdiction over the disputes unless the chosen court or courts have declined jurisdiction.

In the e-contracting cases, to insert a choice of jurisdiction clause in the standard terms and conditions on the website can avoid further ambiguity about which court has jurisdiction when disputes arise. For example, the website owner can incorporate a choice of jurisdiction clause into an interactive click-wrap agreement that the buyer needs to click the "I agree" button to assent to it.[337]

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[334] *Castelletti v. Trummpy* [1999] *ECR* I-1597, cited from Carr (2007), p.547.

[335] *Sinochem v. Mobil* [2000] 1 *Lloyd's Rep* 670, cited from Carr (2007), p.549.

[336] *Ibid*, p.545.

[337] Fawcett, Harris & Bridge (2005), p.511.

3.3.1.2 General Jurisdiction

To determine jurisdiction, generally, some personal connecting factors must be taken into account, such as residence, ordinary residence, habitual residence and domicile. "Residence" is a slippery concept, and its meaning can range from very impermanent living arrangements to connections that approximate or equal domicile.[338] If someone becomes resident in a country, the link of residence may remain during brief periods of absence.[339] In order to acquire a habitual residence, a person must take up lawful[340] residence in the relevant country and live there for a period to demonstrate that the residence has become habitual.[341] The basic rule of general jurisdiction requires a link between the defendant and the chosen court, for example the habitual residence of the defendant and not of the claimant, because the claimant decides whether and when too process legal proceeding and this advantage enables him/her to select the most favourable forum[342].

Bases of Jurisdiction Applicable to Domiciled Defendants

Under Article 2 of the Brussels I Regulation, persons domiciled in a member state shall, whatever their nationality, be sued in the courts of that state. Furthermore, domicile rules

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[338] Green (1953), generally, cited from Scoles, Hay, Borchers & Symeonides (2000), p.338.

[339] *Sinclair v. Sinclair* [1968] p.189, cited from Morris, McClean & Beevers (2005), p. 20.

[340] *Mark v. Mark* [2004] EWCA Civ. 168; [2004] 3 W.L.R. 641, cited from Morris, McClean & Beevers (2005), p.23.

[341] *Nessa v. Chief Adjudication Officer* [1999] 1 W. L. R. 1937, cited from Morris, McClean & Beevers (2005), p.23.

[342] Morris, McClean & Beevers (2005), p.59-60.

within the Brussels I Regulation govern the domicile of individuals[343] and domicile of corporations[344]. With contracts made over the Internet, it is difficult to determine where the party is domiciled, even though the plaintiff can identify the party and locate the transaction.[345] Article 59(1) of the Brussels I Regulation provides that, as regards natural persons, in order to determine whether a party is domiciled in a particular member state, the court shall apply the law of that sate. Article 60(1) lays down that for the purposes of the Brussels I Regulation a company or other legal person or association of natural or legal persons is domiciled at the place where it has (1) its statutory seat or (2) its central administration or (3) its principal place of business. Although Article 60 envisages the possibility that a company's central administration and its principal place of business may be located at different places, it will often be the case that they overlap, especially in relation to small organizations.[346] On the Internet, since the decision of the e-transaction might be made following discussion via video conferencing between senior officers who reside in different states, it has become more difficult to ascertain the location of the central administration.[347]

As discussed in Chapter Two, the UN Convention on the Use of Electronic Communications in International Contacts (the UN Convention) has defined "the location

[343] Article 2 & Article 59 of the Brussels I Regulation.

[344] Article 60 of the Brussels I Regulation.

[345] Fawcett, Harris & Bridge (2005), p.511.

[346] *King v. Crown Energy Trading AG* [2003] ILPr 489, cited from Hill(2005), p.74.

[347] Fawcett, Harris & Bridge (2005), p.511.

of the parties"[348] as "a party's place of business".[349] If a natural person does not have a place of business, the person's habitual residence should be deemed as a factor to determine jurisdiction.[350] The UNCITRAL Model Law on Electronic Commerce is the same as the UN Convention, providing that "if the originator or the addressee does not have a place of business, reference is to be made to its habitual residence".[351] In my view, the person's habitual residence on the Internet occasion should be treated the same as the traditional off-line rule that general jurisdiction should be connected to the habitual residence of the defendant but not the claimant.

Furthermore, according to the UN Convention, if a party does not indicate his place of business and has more than one place of business, then the place of business is that which has the closest relationship to the relevant contract.[352] The closest connecting factors are those that occur before or at the conclusion of the contract.[353] In my opinion, these factors have no difference from the off-line world, which should also relate to statutory seat, central administration or principal place of business. As a person or legal person doing electronic commerce, his/ her statutory seat, central administration or principal place of

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[348] Article 6 of the UN Convention on the Use of Electronic Communications in International Contracts (the UN Convention), A/RES/60/21, 9 December 2005.

[349] Article 6(1) of the UN Convention.

[350] Article 6(3) of the UN Convention; Article 15(4)(b) of the UNCITRAL model Law on Electronic Commerce.

[351] Article 15(4)(b) of the UNCITRAL Model Law on Electronic Commerce.

[352] Article 6(2) of the UN Convention.

[353] *Ibid.*

business can be checked by the claimant, and the result can be found according to some connecting factors such as the registration of the defendant's business, licenses, electronic payments and places of delivery of goods or services. This would lead to the following issue: special jurisdiction.

Bases of Jurisdiction Applicable to Non-domiciled defendants

Article 4 of the Brussels I Regulation provides that "if the defendant is not domiciled in a Member State, the jurisdiction of the courts of each Member State shall, subject to Article 22 and 23, be determined by the law of that Member State". The wording of the provision makes it clear that the basic rule in Article 4 is subject to the provisions of Article 22 concerning exclusive jurisdiction regardless of the domicile of the parties, which refers to subject matters such as immovable property, corporations, public registers, intellectual property and enforcement of judgments.[354] Moreover, Article 4 also expressly states that the basic rule is subject to Article 23, the provision dealing with jurisdiction agreements between parties one or more of whom is domiciled in a Member State. Furthermore, Article 59(2) of the Brussels I Regulation provides that if a party is not domiciled in the state whose courts are seized of the matter, then, in order to determine whether the party is domiciled in another Member State, the court is to apply the law of that state.

[354] Article 22 of the Brussels I Regulation.

3.3.1.3 Special Jurisdiction

Article 5 of the Brussels I Regulation derogates from the general principle contained in Article 2, which gives the claimant the opportunity to proceed against the defendant in a member state in which the defendant is not domiciled. Under this provision, it contains seven matters, one of which, Article 5(1), deals with matters relating to a contract. This general rule does not apply to insurance, consumer and employment contracts.[355]

Article 5(1) provides that:

> "A person domiciled in a Member State may, in another Member State, be sued:
>
> (a) in matters relating to a contract, in the courts for the place of performance of the obligation in question;
>
> (b) for the purposes of the rule that jurisdiction in matters relating to a contract is allocated to the courts for the place of performance of the obligation in question, the place is:
>
> — in the case of the sale of goods, the place in a Member State where, under the contract, the goods were delivered or should have been delivered;
>
> — in the case of the provision of services, the place in a Member State

[355] Article 8-14 of the Brussels I Regulation governs insurance; Article 15-17 is about consumer contracts; Article 18-21 provides about employment contracts.

where, under the contract, the services were provided or should have been provided."

How to ascertain "the place of performance of the obligation in question"[356] is the focal point of how to determine jurisdiction. The place of performance, according to Article 5(1)(b), is the place of delivery of goods (or where it should have been delivered), or the place where the services were provided or should have been provided. Since the place of delivery is a close linking factor to determine special jurisdiction, an electronic contract makes no difference from a paper-based contract when the contract itself involves physical delivery of goods. The difficulty to apply Article 5(1) lies in the issue whether multiple places of delivery are within the scope of the Article 5(1).

Unfortunately, what Article 5(1)(b) does not expressly address the situation where, as regards a contract for the sale of goods, there is more than one place of delivery or, in relation to a contract of services, there is more than one place of performance. Problems with regard to multiple places of delivery of goods or provision of services,[357] can be divided by two categories: one is different obligations have different places of delivery, and the other is the relevant obligation have several places of delivery.

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[356] "The obligation in question" means that which is relied upon as the basis for the claim, explained by Morris, McClean & Beevers (2005), p.72.

[357] Hill (2005), p.135.

At the first category, there are two possibilities: First, disputes concern more than one obligation. Article 5(1) allocates jurisdiction to the courts for each place of performance with regard to the dispute arising out of the obligation, which should have been performed at that place.[358] Second, cases involve two obligations with one principal obligation. The courts for the place of performance of the principal obligation have jurisdiction over the whole claim.[359]

At the second category, there are also two possibilities: First, as is noted by the most recent case *Color Drack GmbH v. Lexx International Vertriebs GmbH*[360], there is a query about "whether the first indent of Article 5(1)(b) of the Brussels I Regulation applied in the case of a contract for the sale of goods involving several places of delivery within a single Member State",[361] and if so, "whether the plaintiff could sue in the court for the place of delivery of its choice"[362] among all places of deliveries. The Court ruled that the applicability of the first indent of Article 5(1)(b) where there are several places of delivery within a single Member State complies with the regulation's objective of predictability, and proximity underlying the rules of special jurisdiction in matters relating to a contract.[363] Because the defendant should expect, when a dispute arises, that he may be sued in a court

[358] Case C-420/97 Leathertex *Divisione Sintetici SpA v. Bodetex BVBA* [1999] ECR I-6747, cited from Hill (2005), p.135.

[359] Case 266/85 *Shenavai v. Kreischer* [1987] ECR 239, cited from Hill (2005), p.135.

[360] *Color Drack GmbH v. Lexx International Vertriebs GmbH* (Case C-386/05), [2007] I. L. Pr. 35.

[361] *Ibid*, p.456.

[362] *Color Drack GmbH v. Lexx International Vertriebs GmbH* (Case C-386/05), [2007] I. L. Pr. 35, p.456.

[363] *Ibid*, p.479.

of a Member State other than the one where he is domiciled. Although the defendant might not know exactly which court the plaintiff may sue him, he would certainly know that any court, which the plaintiff might choose, would be situated in a Member State of performance of the obligation. As to the question whether the plaintiff can sue in a court of its own choice under Article 5(1)(b), the Court ruled that for the purposes of application of the provision, the place of delivery must has the closest linking factor between the contract and the court, and "in such a case, the point of closest linking factor will, as a general rule, be at the place of the principal delivery, which must be determined on the basis of economic criteria".[364] If all places of delivery are "without distinction", and "have the same degree of closeness to the facts in the dispute",[365] the plaintiff could sue in the court of the place of delivery of its choice.

This first query leads to the second consideration: if the places of delivery were in different Member States, will Article 5(1)(b) still apply? Where the relevant obligation has been, or is to be, performed in a number of places in different member states, following the Advocate General (AG)'s opinion, article 5(1)(b) does not apply to this situation as the objective of forseeability of the Brussels I Regulation could not be achieved,[366] that is a single place of performance for the obligation in question could not be identified for the

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[364] *Ibid*, p.480.

[365] *Ibid*, p.473.

[366] *Color Drack GmbH v. Lexx International Vertriebs GmbH* (Case C-386/05), [2007] I. L. Pr. 35, p.472.

purpose of this provision,[367] then, the claimant should turn to Article 2 of the Brussels I Regulation, according to which the court with jurisdiction is that of the domicile of the defendant.

According to the above problems, some solutions can be suggested. If English jurisdiction is involved in a case where jurisdiction is not allocated by Article 5(1)(b) of the Brussels I Regulation and the place of performance is disputed, the court must, first, decide by reference to English choice of law rules which law is applicable to the contractual obligation in question and, then, determine the place of performance by reference to the applicable law. If the place of payment is not stipulated, the creditor's principal place of business should be regarded as the place of performance.[368]

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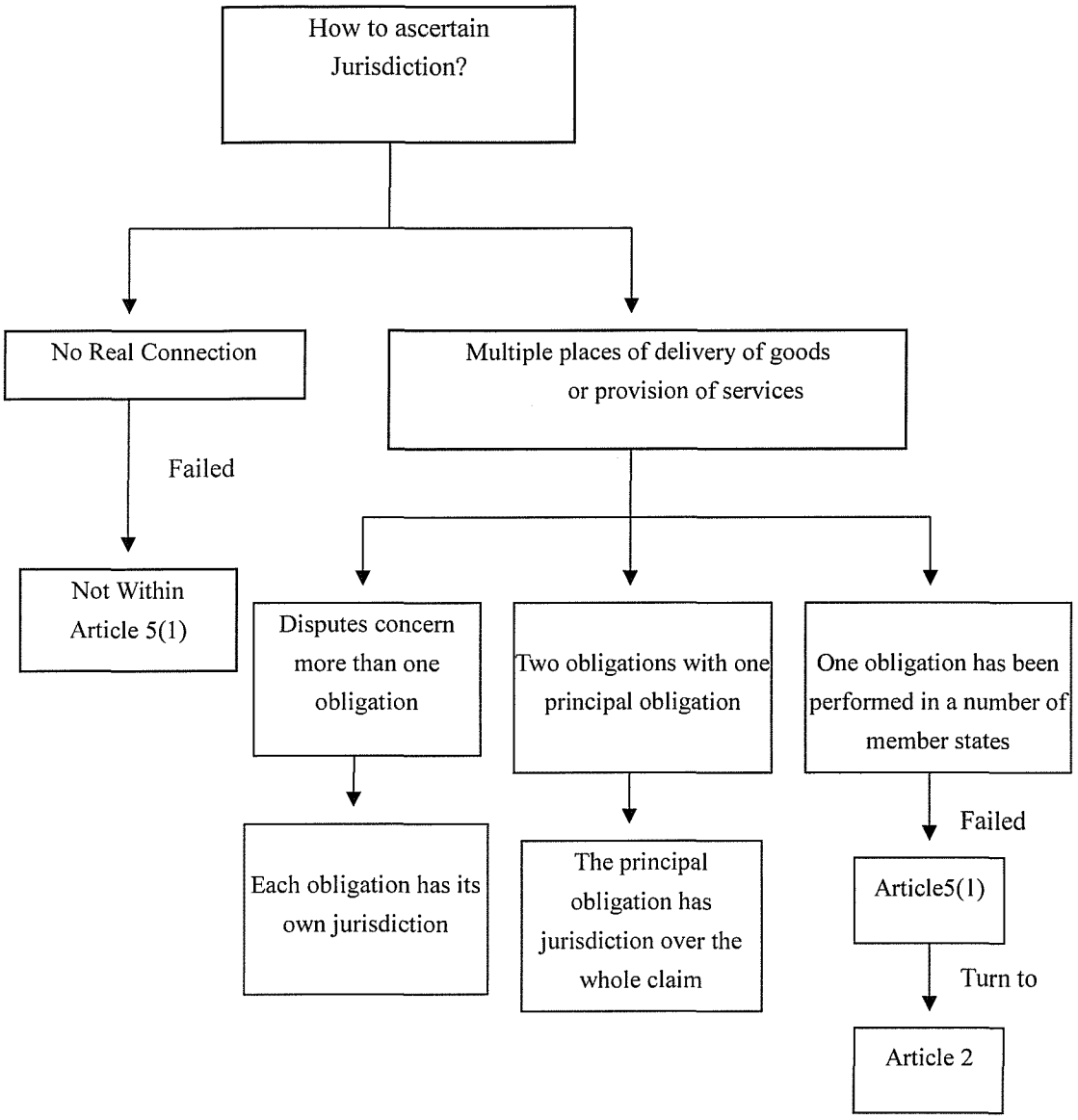
[367] Case C-256/00 *Besix SA v. Wasserreinigungsbau Alfred Kretzschmar GmbH & Co KG (Wabag)* [2002] ECR I-1699, cited from Hill (2005), p.135.

[368] Hill(2005), p.142.



Lastly, in assessing the interpretation of Article 5(1)(b), it should be remembered that it expressly starts with the words "unless otherwise agreed". The place of performance may be "displaced" by an agreement between the parties.[369] If there are various places of delivery, parties may specify by agreement among themselves, which of the various places

[369] European Commission, Proposal, COM(1999)348, p14.

of delivery is to be chosen as the criterion of jurisdiction.[370] This concession to party autonomy confirms the European Court of Justice's case law. In *Zelger v. Salinitri*[371], the European Court of Justice held that, if the place of performance of a contractual obligation has been specified by the parties in a clause which is valid according to the law applicable to the contract, the court for that place has jurisdiction in relation to disputes relating to that obligation under Article 5(1). Also, under Article 5(1)(b) of the Regulation, jurisdiction is awarded to the courts for the place of delivery of goods or provision of services "under the contract". The place to be taken into account is, therefore, the contractually agreed place of performance as distinguished from the actual place of performance. This will provide the buyer of goods or the recipient of services with certainty and predictability as to where they can bring proceedings.[372] For example, where Country A's defendant expressly agrees to perform contractual services in Country B, the Country B's court has jurisdiction in relation to disputes arising out of the contract as long as the parties' agreement is valid according to the applicable law.

But problems may arise where parties haven't got any reality of the contract.[373] That is, under some circumstances a person might retain a domicile in a state with which he no

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[370] *Color Drack GmbH v. Lexx International Vertriebs GmbH* (Case C-386/05), [2007] I. L. Pr. 35, p.472.

[371] Case 56/79 [1980] ECR 89.

[372] Takahashi (2002), p.536.

[373] Hill (2005), p.134.

longer has a strong connection.[374] Another possibility is that two contracting parties may choose a third country which is not related to their personal factors or places of business. In *Mainschiffahrts-Genossenschaft eG (MSG) v. Les Gravières Rhénanes*[375], the European Court of Justice ruled that the general principle – that an agreed place of performance determines jurisdiction under Article 5(1) as long as the agreement is valid according to the application law – does not apply if the agreed place of performance has "no actual connection with the real subject-matter of the contract".[376] So, if the parties solely establish that the courts of a particular place have jurisdiction, it will not fall within Article 5(1), but it can be effective only if the agreement satisfies the requirement of Article 23 of the Brussels I Regulation.

In B2B electronic contracting disputes, can Article 5(1) still apply? If so, how can Article 5(1) be employed to resolve Internet jurisdiction disputes? To answer these questions, it will be first necessary to determine whether an electronic contract is for the sale of goods, or the provisions of services. Next, a distinction will be made between physical goods and digitised goods, physical services and digitised services, and physical performance and digitised performance. This will make it possible to determine the differences and similarities concerning the place of performance between online and offline contracting.

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[374] Scoles, Hay, Borchers & Symeonides (2000), p.337.

[375] Case C-106/95 [1997] ECR I-911.

[376] Case C-106/95 [1997] ECR I-944, para. 33.

Firstly, is there a contract for the sale of goods, the provision of services or neither? Generally, goods can be ordinary goods with physical delivery and digital goods with performance over the Internet, such as digital books, online journals as well as software programs. With regards software program, there is academic authority in favour of the proposition that software transferred online constitutes "goods" for the purposes of the United Nations Convention on Contracts for the International Sale of Goods (CISG).[377] However, carriage of goods by sea, the provision of financial services, providing Internet access to recipients or designing a website for a company should all be categorized as services. In addition, programming software that meets the buyer's specific needs should be regarded as providing services. Sometimes, in a complex software development project, a piece of software program can be broken down into self-contained sections so that when there is payment by instalments on completion of milestones, payment will be due from the buyer on completion of each milestone within the framework of a software development contract.[378]

Secondly, how to distinguish digitised goods from other products. Digitised products are intangible. Intangible property is, by its nature, not physically located in a particular state. However, the fact that a party has downloaded digitised products onto his computer, so that they are located on his hard drive, does not mean that the relevant *situs* is the place

[377] Fawcett, Harris & Bridge (2005), p.514.

[378] Burnett & Klinger (2005), p.74.

where the computer is presently located. Rather, we must consider the more complex question of where digitized products were located at the time of the purported dealing with them.[379]

Thirdly, what can be the place of performance of the obligation in question in the cyberspace? As discussed before, between businesses the place of delivery is usually included by the contract of sale.[380] However, it becomes complicated when parties do not indicate the place of delivery in their contract, because it might involve multiple places of delivery and services might also be provided by the seller's agencies. Furthermore, it would be even more complex when the transaction involves the delivery of digitised goods. There are a number of places where electronic transactions are processed, for example, place of dispatch and receipt, the place where the seller has a specified personal connecting factor and the place where the recipient (i.e. the buyer) has a specified personal connecting.

The Place of Dispatch / uploading

The first possibility of the place of performance is that the place where the information was dispatched, that is, where the information was uploaded on the web server.[381] But it is difficult to identify which particular computer constitutes the place of dispatch. Article 10(3) of the UN Convention provides that "an electronic communication is deemed to be

[379] Fawcett, Harris & Bridge (2005), p.1301.

[380] Deveci (2006), p.43.

[381] Dow Jones Case, (2002) 210 CLR 575, p.15.

dispatched at the place where the originator has it place of business". In practice, a seller is likely to select the location of its server on a number of criteria, including the cost and space and speed of the service, and the convenience and freedom offered in the state where it is located.[382] The place where the seller is located when it uploads the product is suggestive since it is the place where the seller takes the first substantial steps to make the digitised products available. It has a more realistic claim to be the *situs* than the artificial residence of one of the parties.[383] However, it is difficult to describe the location of the seller when he begins the process of uploading at the *situs* at the time of transfer to the recipient. In addition, it may be impossible for the recipient to determine the location of the seller at the time that it uploads the product and be contrary both to his expectations and the expectations of third parties if his law is applied.[384] Thus, it is much more in favor of the seller, if the place of dispatch is considered as the place of performance.

The Place of Receipt / downloading

The second possibility for the place of performance is the place where the information was received by the recipient, that is, the place where the information was downloaded onto the computer of the recipient. The place of downloading has a strong case for being treated as a *situs*.[385] It is arguably most appropriate to say that transfer occurs in the state where the

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[382] Fawcett, Harris & Bridge (2005), p.1306.

[383] *Ibid*, p.1305.

[384] *Ibid*, p.1305.

[385] *Ibid*, p.1304.

digitised product is downloaded.[386] But if a digital product is attached in an email from the seller, should the place of business be the place where the recipient's mailbox is situated? Another concern also arises when the recipient agrees to purchase statistical information over the Internet. This is something, which the recipient pays for a yearly subscription (e.g. an online journal or magazine) and can use as much as he wants over the year. The recipient may download the information at various times in various Member States as he moves around Europe downloading it on a laptop. Moreover, it is possible that when there are two recipients, one downloads it in China, the other downloads it in the United State, under these circumstances whose court will hear the case. Then it is difficult to identify a single place of receipt, under this circumstance, the place of receipt should be deemed as the place of the recipient's habitual residence or place of business, according to Article 10(3) of the UN Convention provides that "an electronic communication is received at the place where the addressee has its place of business".

The place where either the seller or recipient has a closest connecting factor

Either the seller or the recipient's place of business, principal place of business, central administration, statutory seat or habitual residence has more promise as a connecting factor. It is supported by Article 60 of the Brussels I Regulation, Recital 19 and Article 2 of the EC Directive on Electronic Commerce referring to the place of establishment, Article 31 of the United Nations Convention on Contracts for the International Sale of Goods (CISG)

[386] Article 5(1)(b) of the Brussels I Regulation.

recognizing the place of business as a connecting factor, Article 15(4) of the UNCITRAL Model Law on Electronic Commerce and Articles 6 and 10 of the UN Convention on the Use of Electronic Communications in International Contracts concerning the closest relationship to the relevant contract.

But where is the place of performance in cases of electronic transactions? In my perspective, on the basis of the above analysis, a solution based on a closest connecting factor is to be preferred to one based on the place of dispatch or receipt.

When selling physical or digitised goods over the Internet with physical delivery, the place of performance in question should be the place of delivery of goods (or the place where the goods should have been delivered). When signing service contracts over the Internet with physical services, the place of performance should be the place where the services were provided or should have been provided. Physically delivered goods and service will both apply to the place of the seller (sometimes, sellers can be service providers if sellers hold their own Internet server) and the recipient, because sometimes the buyer (recipient) cannot sue in his country. For example, in accordance with the practice of the international sale of goods under the «Incoterms 2000», "Ex Works' means that the seller delivers when he places the goods at the disposal of the buyer at the seller's premises or another named place (i.e. works, factory, warehouse, etc) not cleared for export and not loaded on any

collecting vehicle.[387] Similarly, in case of a free-on-board sale (FOB), delivery takes place at the port of loading, which is usually in the seller's country. In the case of a cost-insurance-freight sale (CIF), delivery of the relevant documents (especially the bill of lading) amounts to symbolic or constructive delivery of the goods.[388] Therefore, under these particular circumstances, the relevant place will be where the documents were or should have been tendered rather than where the goods were located at the time of the tender.[389] Furthermore, for services, it is suggested that it should be provided in the country of the seller (service provider) or in the country of the recipient.

When selling digitised goods with delivery over the Internet, such as the seller selling the software and the buyer/recipient downloading it onto his computer or instantaneous electronic transfer, the place of performance in question should be the recipient's place of business, that is the place where the goods are delivered should be regarded as being where the recipient has its place of business. But why should the place of performance be the place of business rather than the place of downloading? Because the buyer / recipient can order and download his digitised products while away, at a place unconnected with his domicile or place of business. If the law allows the buyer to sue at the place of downloading, the buyer might go to that place with bad intention of choosing a favourable

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[387] «Incoterms 2000», by the International Chamber of Commerce, available at http://www.iccwbo.org/incoterms/preambles/pdf/EXW.pdf (last visited 12 Jan 2006).

[388] *Ibid.*

[389] Stone (2002), p.126.

jurisdiction. Although according to Article 5(1)(b), the place of performance in question is the place where the goods were delivered or should have been delivered, thus, the recipient's place of downloading should be logically deemed to be the place of delivery, it conflicts with Article 6(4)(a) of the UN Convention on the Use of Electronic Communications in International Contracts, which provides that "a location is not a place of business merely because that where equipment and technology supporting an information system used by a party in connection with the performance of a contract are located". However, the place of performance in Article 5(1)(a) of the Brussels I Regulation as a factor to determine jurisdiction is compatible with the rule of the UN Convention which was mentioned earlier, that special jurisdiction should be determined by the place which has "the closest relationship to the relevant contract".[390] In my opinion, in cases of digitised goods with performance over the Internet, Article 5(1)(b) of the Brussels I Regulation should not apply because of the uncertainty of the place of electronic delivery. I propose that in cases of digitised goods delivered over the Internet, the place of performance should be located at a recipient's place of business indicated by the party. If a party has not indicated a place of business or has more than one place of business, then the place of business should be the one with the closest relationship to the relevant contract or where the principal place of business is situated. Because it is possible that the seller may be resident and have his business in State A, while the actual uploading activities happen in State C, while the recipient may download the digitised products when away from his /

[390] Article 6(2) of the UN Convention.

her residence or principal place of business. As discussed earlier in this section, there is a possibility that a software development contract with several milestones may be transferred individually in different countries to the buyers. Under these circumstances, the principal place of business of a party should be the appropriate *situs*[391] as the place of performance of contract.

3.3.1.4 Exclusive Jurisdiction

Article 22 of the Brussels I Regulation covers disputes, which are subject to exclusive jurisdiction according to the subject matters. It sets out a number of mandatory and exclusive rules of jurisdiction regardless of domicile or agreements between the parties for certain proceedings relating to immovable property[392], certain proceedings concerning the formation and dissolution of companies and the decisions of their organs[393], certain proceedings concerning entries in public registers[394], certain proceedings concerning intellectual property[395] and proceedings concerning the enforcement of judgments[396]. Thus, for example, the courts of the member state in which the property is situated shall have exclusive jurisdiction over disputes concerning property or tenancy.[397] The courts of the

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[391] Fawcett, Harris & Bridge (2005), p.1302.

[392] Article 22(1) of the Brussels I Regulation.

[393] *Ibid*, Article 22(2).

[394] *Ibid*, Article 22(3).

[395] *Ibid*, Article 22(4).

[396] *Ibid*, Article 22(5).

[397] *Ibid*, Article 22(1).

corporate seat shall hear the cases of disputes governed by company law.[398] Accordingly, the courts of country where the register is kept, the courts of the country of the registration of intellectual property rights, the courts of the country of enforcement will hear specific subject matters.[399] In my view, if parties deal with the above subject matters in electronic contracts, Article 22 should be applied without prejudice.

3.3.2 US Jurisdiction Tests Employed in E-Contracting Disputes

> "The global community must address complex issues involving choice of law and jurisdiction – how to decide where a virtual transaction takes place." [400]

Due to the fact that U.S. companies are at the forefront of Internet technology, litigation regarding e-commerce in the United States is more advanced than anywhere else in the world. Similar to the EU Brussels regime (general and special jurisdiction), U.S. Law has two types of jurisdiction: general and specific. General jurisdiction is jurisdiction over the defendant for any cause of action, whether or not related to the defendant's contacts with the forum state; whereas specific jurisdiction applies when the underlying claims arise out of, or are directly related to, a defendant's contacts with the forum state.[401]

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[398] Article 22(2) of the Brussels I Regulation.

[399] Article 22(3)-(5) of the Brussels I Regulation.

[400] Nimmer, R. T. (2001), 40.

[401] Chik (Spring 2002), 243, p.248-49.

The above notion comes from the famous case *International Shoe Co. v. Washington*[402], which indicated that the minimum contacts test has both a general and a specific component.[403] What is meant by "Minimum contacts"? It is a requirement that must be satisfied before a defendant can be sued in a particular state. In order for the suit to go forward in the chosen state, the defendant must have some connections with that state. For example, advertising or having business offices within a state may provide minimum contacts between a company and the state.

3.3.2.1 General Jurisdiction

"General jurisdiction" is the most basic and certain form of exercising physical power, which is related to the concepts of "residence", "domicile" and "nationality" as was discussed in the earlier EU section. The US general jurisdiction resembles Articles 2 and 59 of the Brussels I Regulation. The term "general jurisdiction", as it is used in the United States, is broader than the Brussels Regime, which refers to assertions of territorial jurisdiction that do not depend upon the character of the dispute between the parties.[404] It provides a fairly generous conception of general jurisdiction, whereas the Brussels regime regulates jurisdiction in civil and commercial matters as between domiciliaries of Western European countries.[405]

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[402] 326 U.S. 310 (1945), cited from Scoles, Hay, Borchers & Symeonides (2000), p.343.

[403] Scoles, Hay, Borchers & Symeonides (2000), p.344.

[404] *Ibid*, p.329.

[405] *Ibid*, p.330.

Under the most commonly employed minimum contacts test, general jurisdiction is usually premised on "continuous and systematic" contacts between the defendant and the forum so as to make the defendant amenable to jurisdiction without regard to the character of the dispute between the parties.[406] It is clear that if the contacts that are unrelated to the dispute ("unrelated contacts") meet the threshold of being "continuous and systematic", the defendant is amenable to general jurisdiction based upon its contacts with the state.

The most difficult issue in relation to general jurisdiction is the amount of unrelated contacts needed to subject a defendant to *in personam* jurisdiction[407]. That is, the defendant has some continuing physical presence in the forum, usually in the form of offices. There is a question whether "mere" residence, as opposed to domicile or nationality can be a sufficient connection for the exercise of general jurisdiction over an individual defendant.[408] The Second Restatement states that a defendant's residence is sufficient for the exercise of general jurisdiction "unless the individual's relationship to the state is so attenuated as to make the exercise of such jurisdiction unreasonable."[409]

As discussed above, general jurisdiction results from a party's continuous, systematic and

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[406] International Shoe, 326 U.S. at 320, 66 S.Ct. at 160, 90 L.Ed. at 104.

[407] Scoles, Hay, Borchers & Symeonides (2000), p.348.

[408] *Ibid*, p.338.

[409] Restatement, Second, Conflict of Laws §30 (1971), cited from Scoles, Hay, Borchers & Symeonides (2000), p.338.

ongoing ties to a certain forum.[410] However, specific jurisdiction turns upon the character of the dispute ("related contacts"). That is, if the contact is related to the cause of action, such related-contact jurisdiction is specific jurisdiction, because (unlike general jurisdiction) it is dependent upon the character of the dispute.[411]

3.3.2.2 Specific Jurisdiction

Specific jurisdiction is often used when a party's contacts do not fulfil the general jurisdiction criteria, and permits the court to assert jurisdiction over parties to a dispute arising from the parties' contacts with the State involved.[412] This is similar to Articles 5 and 6 of the Brussels I Regulation, although under the Brussels regime, it is called "special jurisdiction". The term "specific" jurisdiction is descriptive because it is jurisdiction that is specific to the dispute. Due to the requirement that the contacts are "related" to the dispute, those contacts may well suffice for jurisdiction in the lawsuit at hand, but may not in another lawsuit relating to the defendant's activities in another state.[413] Thus, determining whether specific jurisdiction exists in a particular case depends, then, upon two separate considerations. The first is whether the contacts are "related" to the dispute. The second, assuming that the contacts are so related, is whether the contacts are "constitutionally

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[410] *Helicopteros Nacionales de Colombia, S.A. v. Hall*, 466 U.S.408 (1984), cited from Scoles, Hay, Borchers & Symeonides (2000), p.345.

[411] Scoles, Hay, Borchers & Symeonides (2000), p.344.

[412] *Ashi Metal Ind. Co. v. Superior Court*, 480 U.S. 102 (1987), cited from Scoles, Hay, Borchers & Symeonides (2000).

[413] Specific Jurisdiction and the "Arise from or Relate to" Requirement...What Does it Mean?, 50 Wash. & Lee. L. Rev. 1265, 1269 – 70 (1993), cited from Scoles, Hay, Borchers & Symeonides (2000), p.300.

sufficient".[414]

For the last few years, U.S courts, both state and federal, have been wrestling with the problematic issue of personal jurisdiction in the context of Internet-related activities. In deciding these cases, US courts have been reluctant to view the mere general availability of a web site as a "minimum contract" sufficient to establish specific personal jurisdiction over a non-resident defendant, at least in the absence of other contracts with the forum state.[415] Whether a defendant can be subject to specific jurisdiction in contract cases depends on the entire course of dealing, including "prior negotiation and contemplated future consequences" establishing that "the defendant purposefully established minimum contacts with the forum."[416]

In practice, when trying to determine whether it has personal jurisdiction over a non-resident defendant, the U.S. court will use a two-step test. First, the court will examine the State's long-arm statute in order to determine whether there is a statutory basis for allowing that plaintiff to sue the defendant in that forum. In the second step, the court looks for some acts or activities by which the defendant has **purposefully** availed himself or herself of the privilege of conducting business in that State to such an extent that the

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[414] Scoles, Hay, Borchers & Symeonides (2000), p.300.

[415] Smith (2002), 347.

[416] *Burger King Corp. v. Rudzewicz*, 471 U.S. 479, 105 S.Ct. 2185, 85 L. Ed. 2d 528 (1985), cited from Scoles, Hay, Borchers & Symeonides (2000), p.379.

defendant should **reasonably** anticipate being sued there.[417] The second step plays a large role in the jurisdiction calculus, that is, "purposefully" and "reasonableness".

In addition, specific jurisdiction can also be examined by two factors: exercise of jurisdiction is consistent with these requirements of "minimum contacts" and "fair play and substantial justice". These can firstly be determined by where the non-resident defendant has purposefully directed his activities or carried out some transaction with the forum or a resident thereof, or performed some act by which he purposefully availed himself of the privileges of conducting activities in the forum, thereby invoking the benefits and protections of its laws; Secondly, the claim arises out of or relates to the defendant's forum-related activities; and thirdly, the exercise of jurisdiction is reasonable.[418]

In the *Zippo* case, the Western Pennsylvania District Court expanded on the International Shoe "minimum contact test" by stating that personal jurisdiction for e-commerce companies should be dealt with on a "sliding scale".[419] That is, the "minimum contacts" test sets forth the due process requirements that a defendant, not present in the forum, must meet in order to be subjected to personal jurisdiction: "he must have certain minimum contracts with it such that the maintenance of the suit does not offend 'traditional notions

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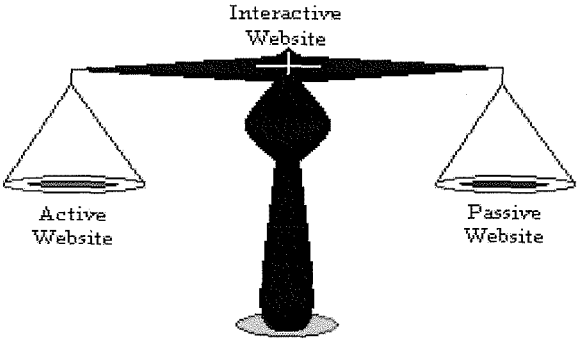
[417] World Wide Volkswagen v. Woodson, 444 U.S. 286 (1980), see also in Mitrani (2001), p.56.

[418] *Ballard v. Savage*, 65 F.3d 1495, 1498 (9th Cir. 1995), cited from Exon (2003), 21, p.27.

[419] See *Zippo Mfg. Co. v. Zippo Dot Com, Inc.*, 952 F. Supp. 1119 (W. D. pa 1997), at 1124.

of fair play and substantial justice.' "[420] *Zippo Mfg. Co. v. Zippo Dot Com. Inc*[421] is emerging as the seminal case on whether an Internet website provides the minimum contacts necessary to establish jurisdiction. Zippo introduced a sliding scale to analyse the contacts of potential defendants created by Internet websites. In determining the constitutionality of exercising jurisdiction, the *Zippo* court focused on the "nature and quality of commercial activity that an entity conducts over the Internet"[422].



The Sliding Scale

The sliding scale approach can be divided into three categories: first, active websites. The defendant enters into contracts with residents of a foreign jurisdiction that involve the repeated transmission of computer files over the Internet.[423] That is to say that, in order to justify jurisdiction a company will have to show that it "clearly does business over the Internet", such as "entering into contracts with residents of a foreign jurisdiction that

[420] Int'l Shoe Co. v. State of Wash., 326 U.S. 310 (1945).

[421] See *Zippo Mfg. Co. v. Zippo Dot Com, Inc.*, 952 F. Supp. 1119 (W. D. pa 1997).

[422] *Ibid*, at 1124.

[423] *CompuServe. Inc. v. Patterson*, 89 F. 3d. 1267 (6th Cir. 1996).

involve the knowing and repeated transmission of computer files".[424] These are grounds for the exercise of personal jurisdiction.

Second, passive websites. Passive websites merely provide information to a person visiting the site. They may be accessed by Internet browsers, but do not allow interaction between the host of the website and a visitor to the site. Passive websites do not conduct business, offer goods for sale, or enable a person visiting the website to order merchandise, services, or files. The defendant has simply posted information on a passive Internet website which is accessible to users in foreign jurisdictions. This is not a ground for the exercise of personal jurisdiction.

Third, interactive websites. Interactive websites make up the middle of the sliding scale where a user can exchange information with the host computers. In this middle scale, jurisdiction should be determined by the "level of interactivity and commercial nature of the exchange of information that occurs on their web site."[425] Factors such as online contracting (found on most e-commerce sites) can show a high level of interaction leading to the exercise of jurisdiction. This is the crucial point of the sliding scale analysis. If the activities occurring on a defendant's website lean more towards the passive side of the scale, personal jurisdiction will not be applied. If, however, the activity slides toward the

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[424] Cunard & Coplan (2001),

[425] See *Zippo Mfg. Co. v. Zippo Dot Com, Inc.*, 952 F. Supp. 1119 (W. D. pa 1997), at 1124; see also *Maritz Inc. v. Cybergold Inc.* 947 F Supp 1328 (ED Mo1996).

active side of the scale, personal jurisdiction will likely to be upheld.[426]

As discussed above, the most developed doctrine of US jurisdiction is the *Zippo* sliding scale which encourages inquiry into the level of interactivity of a website. However, in order to avoid that it falls in the middle of the scale, one would have expected the court to provide a rough definition of "interactivity", but it did not.[427] Moreover, the *Zippo* test with its emphasis on the level of interactivity inherent to a website, has become less relevant given that almost all commercial sites now are "at least highly interactive, if not integral to the marketing of the website owners."[428]

US courts in accordance with jurisdictional developments abroad, have further developed an alternative approach to determining jurisdiction in E-commerce: an "effects" test, based on the Supreme Court's decision in *Calder v. Jones*.[429] It permits states to exercise jurisdiction when the defendants intentionally harm forum residents. In applying this "effects" test to Internet cases, U.S courts focus on the actual effects the website has in the forum state rather than trying to examine the characteristics of the website or web presence

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[426] See *Zippo Mfg. Co. v. Zippo Dot Com, Inc.*, 952 F. Supp. 1119 (W. D. pa 1997), at 1124, cited from Exon (2003), 21, p.32.

[427] Boone (Spring 2006), 241, p.258.

[428] Rice (2004), 11, 52.

[429] *Calder v. Jones*, 465 U.S. 783 (1984), cited from Boone (Spring 2006), 241, 259-260. In Calder, a California resident brought suit in California Superior Court against Florida residents who allegedly wrote libellous matter about her in a prominent national publication. In holding that jurisdiction was proper, the Court found "the brunt of the harm, in terms both of respondent's emotional distress and the injury to her professional reputation, was suffered in California."

to determine the level of contact the site has with the forum state.[430] However, an "effects" test will more easily apply to injuries in tort to individuals where injury is localized or intent can be inferred, but not when E-commerce cases involving corporations.[431] Because determining where a larger, multi-forum corporation is "harmed" is a difficult prospect[432]. The court noted that the "effects" test does not "apply with the same force" to a corporation as it does to an individual because a corporation "does not suffer harm in a particular geographic location in the same sense that an individual does."[433]

Questioning the utility of the *Zippo* and "effects" tests, some US courts have focused on whether there was "something more" needed for the exercise of jurisdiction. Courts further introduced the "targeting test".[434] The requirement of the "targeting test" is satisfied "when the defendant is alleged to have engaged in wrongful conduct targeted at a plaintiff whom the defendant knows to be a resident of the forum state".[435] It has been argued that the targeting-based test is a better approach for the courts to employ than the sliding scale test in *Zippo* when determining jurisdiction in cases involving Internet-based contacts. The targeting test, unlike the other one, places greater emphasis on identifying "the intentions

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[430] Boone (Spring 2006), 241, p.260.

[431] *Ibid*, p. 261.

[432] Rice & Gladstone (2003), 601, 629.

[433] *Cybersell, Inc. v. Cybersell, Inc.*, 130 F. 3d 414, 420 (9th Cir. 1997), cited from Boone (2006), 241, 263.

[434] *Bancroft & Masters, Inc. v. Augusta Nat'l Inc.*, 223 F. 3d 1082, 1087 (9th Cir. 2000), cited from Bhalloo (2004), 225, p.262.

[435] *Ibid.*

of the parties and the steps taken to either enter or avoid a particular jurisdiction."[436] Further, the advocates of the targeting test view it as a better and fairer approach for determining whether the defendant reasonably anticipated being haled into a foreign court to answer for her activities in the foreign forum state.[437] This determination is central to the due process analysis articulated by the United States Supreme Court in *World-Wide Volkswagen*: "[T]he defendant's conduct and connection with the forum State are such that he should reasonably anticipate being haled into court there. The Due Process Clause, by ensuring the 'orderly administration of the laws,' gives a degree of predictability to the legal system that allows potential defendants to structure their primary conduct with some minimum assurance as to where that conduct will and will not render them liable to suit.[438]

There are two approaches developed among scholars and courts. The first one is called "network-mediated contacts": "new considerations such as a Web site's 'interactivity' and 'target audience' are the essential concepts courts use to determine whether to treat virtual contacts as minimum contacts."[439] Most courts have employed some variation of the sliding-scale framework developed in the *Zippo* case and have incorporated a "targeting" or "express aiming" requirement seemingly inspired by the "effects" test the Supreme

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[436] Michael Geist, Internet Law in Canada 69 (2d ed. 2001), cited from Bhalloo (2004), 225, p.264.

[437] *Ibid.*

[438] *World-Wide Volkswagen Corp. v. Woodson*, 444 U.S. 286, 297 (1980), cited from Bhalloo (2004), 225, p.264.

[439] Spencer (2006), 71, p.72.

Court developed in *Calder v. Jones*.[440] The Ninth Circuit was one of the first circuit courts to address the issue of personal jurisdiction based on network-mediated contacts in *Cybersell, Inc. v. Cybersell, Inc.*[441] In *Cybersell*, it indicated that Web sites that simply advertise or solicit sales could not support an assertion of personal jurisdiction without "something more" to indicate that the defendant purposefully directed his activity in a substantial way to the forum state. Because the defendant's website in *Cybersell* was "an essentially passive home page," the court concluded, "We cannot see how from that fact alone it can be inferred that the defendant deliberately directed its merchandising efforts toward forum residents."[442] Thus, it indicated that for a website to serve as the basis for personal jurisdiction, it would have to be specifically targeted at the forum states.[443]

The other is "a targeting approach": "for the court, deliberate action, rather than the more problematic notions of interactivity and "effects", is important to E-commerce jurisdictional development."[444] The targeting or "deliberate action requirement" of *Cybersell* "should apply irrespective of whether the defendant's website is passive or highly interactive."[445] That is, the targeting approach requires that "deliberate action" aimed at the forum state consisting of "transactions between the defendant and residents of

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[440] Spencer (2006), 71, p.74.

[441] 130 F. 3d 414, 419-420 (9th Cir. 1997), cited from Spencer (2006), 71, p.80-81.

[442] 130 F. 3d 414, 419 (9th Cir. 1997), cited from Spencer (2006), 71, p.81.

[443] 130 F. 3d 414, 419-420 (9th Cir. 1997), cited from Spencer (2006), 71, p.81.

[444] Boone (Spring 2006), 234, 263.

[445] Traynor & Pirri (2002), 93, 119.

the forum or conduct of the defendant purposefully directed at residents of the forum state."[446] In doing so, the court effectively rejected the *Zippo* approach because *Zippo* does not require deliberate action for a finding of personal jurisdiction.

However, the common view of the above arguments is a new criterion: courts have required additional indicia of state-specific "targeting" before they permit a finding of "purposeful availment". That is the new factor: the overall target audience of Internet activity.[447] This framework is drawn from *Asahi Metal Industry Co. v. Superior Court of California*[448], which was favoured by Justice O'Connor, and three other justices.[449] The "targeting" approach is applicable to both contract and tort, but in tort, jurisdiction is extended to cover the place where there is harm affected.

So how can we ascertain the "targeting" approach in contract?

Firstly, it is based on the intention of the defendant: the defendant must "direct" electronic activity into the forum state. Unlike the *Zippo* Approach, "a targeting analysis seeks to identify the intentions of the parties and to assess the steps taken to either enter or avoid a

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[446] *Millennium Enterprises, Inc. v. Millennium Music, L.P.*, 33 F. Supp. 2d 907, 921 (D. Or. 1999), cited from Boone (Spring 2006), 241, p.263.

[447] Spencer (2006), 71, p.75.

[448] 480 U.S. 102 (1987), cited from Boone (Spring 2006), 241, p.244.

[449] Boone (Spring 2006), 241, p.244.

particular jurisdiction."[450] It requires that a defendant specifically aims its online activities at a forum to come under the jurisdiction of that state.[451] This will give courts a solid conceptual basis: a "deliberate or intended action" from which to tackle sophisticated cases and produce consistent results.[452] Secondly, the defendant must intend to engage in business or other interactions ("something more") in the forum state. Thirdly, the defendant must engage in an activity that created under the forum state's law a potential cause of action with regard to a person in the forum state.

According to the three measuring mechanisms above, the "targeting" approach gives more legal certainty over determining Internet jurisdiction. It is suggested that this approach, as well as providing consistency and legal certainty, does not totally preclude the "American propensity toward individualized justice".[453]

3.3.2.3 Comparative Analysis of US and EU

Compared to the EU special jurisdiction approach, the US specific jurisdiction approach is different. Whilst the US employs "Zippo", "effects" and "targeting" tests, the EU has adopted classical general and special jurisdiction approaches concerning special jurisdiction in the Brussels Regulation, in an effort to bolster confidence in E-commerce.

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[450] Berman (2002), 311, p.418.

[451] Aciman & Vo-Verde (2002), 16, 19, and also *ALS Scan, Inc. v. Digital Serv. Consultants, Inc.*, 293 F. 3d 707, 714 (4th Cir. 2002).

[452] Boone (Spring 2006), 241, p.266.

[453] *Ibid*, p.274.

For instance, although Article 15 of the Brussels I Regulation governs consumer contracts, it is a good example of a country-of-destination approach. It provides that jurisdiction will be proper if the contract has been concluded with a person who pursues commercial or professional activities in the Member State of the consumer's domicile or, by any means, directs such activities to that Member State or to several States including that Member State, and the contract falls within the scope of such activities.[454] The language of Article 15 leaves open the possibility that a targeting framework could be utilised under the Brussels Regulation without substantive change to the language of the Regulation itself.[455] However, it is still ambiguous without the explicit definition or explanation of "direct such activities" in Brussels I Regulation.

Moreover, both the US and the EU have appeared to be applying their individually developed standards of determining jurisdiction in the context of conventional contracts to the jurisdictional problem of e-commerce. It may be necessary either to amend the law by modifying the normal rules on jurisdiction, or to amend the law by introducing a special regime of rules of jurisdiction for cases of electronic contracting. For the former, a new rule could be introduced in Article 5(1)(b) of the Brussels I Regulation, which would provide how to define the place of performance for digitised products and services. Some scholars have argued that this would be to treat electronic commerce contracts differently

[454] Article 15 of the Brussels I Regulation.

[455] Boone (Spring 2006), 241, p.277.

from other contracts, which goes against the current philosophy of Article 5(1).[456] In my view, to a broader respect, this would not be contrary to the fundamental principle that contracts can be formed by electronic means. But in a narrower view, electronic contracting or transactions do have their unique characters. However, there is still no clear indication of the creation of a special regime of jurisdiction rules for e-commerce cases. It is a process, which is time and money consuming. Even if efforts were made to draft a specific regulation or convention, it would still take time and efforts to come into force. It is conceivable that in future the new fast-developing electronic communication industry will develop further high techniques that would clearly indicate that existing laws were no longer suitable or applicable. A special regime of jurisdictional rules for electronic commerce should then be introduced on the ground that traditional territorially based concepts of jurisdiction are not entirely appropriate anymore to regulate cyberspace.

3.3.3 Chinese Legislation on Jurisdiction

To my knowledge, so far no Internet jurisdiction specific statutes have been promulgated in China. Therefore, the general international or national rules covering issues of jurisdiction are currently being used. Jurisdiction agreements concluded through electronic means should be regarded as equivalent to the ones in writing, on the basis of the Chinese Contract Law and the Chinese Electronic Signature Law. Chapter II of the Civil Procedure

[456] Fawcett, Harris & Bridge (2005), p.594.

Law of the People's Republic of China[457] deals with the issues of jurisdiction to adjudicate and also covers international arbitration and judicial assistance (e.g., enforcement of foreign Courts' judgments or the awards of a certain arbitration tribunal).

The Civil Procedure Law, unlike relevant laws in the EU and US, does not address the jurisdiction provision by focusing on general and special principles. Overall, it governs jurisdiction of contracts by providing that "a lawsuit initiated for a contract dispute shall be under the jurisdiction of the people's court in the place where the defendant has his domicile or where the contract is performed"[458]. Currently, there are three core interpretations of the Civil Procedure Law issued by the Supreme Court to help implementing jurisdiction issues. They are: the 1992 Opinions of the Supreme Court on the Implementation of the Civil Procedure Law; the 1998 Regulations of the Supreme Court Regarding Some Questions on the Enforcement of Judgments; the 2002 Regulations of the Supreme Court Regarding Some Questions on International Jurisdiction in Civil and Commercial Matters.

The Chinese Civil Procedure Law, just like the EU and US, employs "party autonomy". Article 25 of the Civil Procedure Law regulates choice of court issues and is in favour of "party autonomy". It states that "the parties to a contract may choose through agreement

[457] Article 237-270 of the Civil Procedure Law of the People's Republic of China, promulgated on 9 April 1991.

[458] Article 24 of the Civil Procedure Law of the People's Republic of China.

stipulated in the written contract the people's court in the place where the defendant has his domicile, where the contract is performed, where the contract is signed, where the plaintiff has his domicile or where the object of the action is located to have jurisdiction over the case, provided that the provisions of this Law regarding jurisdiction by level and exclusive jurisdiction shall not be violated".[459]

Article 243 deals with lawsuits brought against a defendant who is not domiciled in the People's Republic of China concerning a contractual dispute or other disputes over property rights and interests. The defendant shall be sued in the courts where the contract is signed or performed, where the object of the action is located, where the defendant's distrainable property is located, where the infringing act takes place, or where the representative agency, branch or business agent is located.

Moreover, Article 244 of the Civil Procedure Law specifically applies to international cases, requiring that parties should choose the court which has substantial connection with the disputes.[460] Moreover, Article 246 of the Civil Procedure Law provides that "Lawsuits

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[459] Article 25 of the Civil Procedure Law of the People's Republic of China, available at http://en.chinacourt.org/public/detail.php?id=2694 (last visited on 27 August 2007).

[460] Article 244 of the Civil Procedure Law provides that "Parties to a dispute over a contract involving foreign interests or over property rights and interests involving foreign interests may, through written agreement, choose the people's court in the place which has actual connections with the dispute as the jurisdictional court. If a people's court of the People's Republic of China is chosen as the jurisdictional court, the stipulations on jurisdiction by level and exclusive jurisdiction in this Law shall not be contravened".

initiated for disputes arising from the performance of contracts for Chinese-foreign equity joint ventures, or Chinese-foreign contractual joint ventures, or Chinese-foreign cooperative exploration and development of the natural resources in the People's Republic of China shall be under the jurisdiction of the people's courts of the People's Republic of China".

In my opinion, the jurisdiction provision in Civil Procedure Law is vague when referring to international contracts for the sale of goods. With emerging electronic contract disputes, the Civil Procedure Law will appear to be increasingly insufficient. Although the Chinese Electronic Signature Law doesn't deal with any jurisdiction issues, China has tried to establish some regulations governing the Internet, with for examples, the Management of Chinese Computer Information Networks connected to International Networks Regulation,[461] as well as the Computer Information Network and Internet Security, Protection and Management Regulation[462]. These two regulations cover both civil and criminal issues. However, the rules relating to jurisdiction are still largely insufficient. There are specific rules to determine which law should apply, such as Article 15 of the Management of Chinese Computer Information Networks Regulation, which states vaguely that those who violate these regulations while at the same time breaking other

[461] The Provisional Regulations of the People's Republic of China Governing the Management of Computer Information Networks Hooked Up With International Networks, available at http://www.fas.org/irp/world/china/docs/internet_960201.htm (last visited 31 August 2007).

[462] Computer Information Network and Internet Security, Protection and Management Regulations, available at http://www.woodmedia.com/cinfolink/netregs.htm (last visited 31 August 2007).

relevant laws and administrative rules and regulations shall be punished in accordance to the relevant laws and administrative rules and regulations.

Overall, according to Chinese law, there are six basic principles to determine the jurisdiction: the domicile principle,[463] the personal jurisdiction principle,[464] the freedom of choice principle,[465] the principle of related location,[466] the exclusive jurisdiction principle[467] and the territorial jurisdiction principle.[468] The fundamental jurisdiction rule in Chinese conflicts of law is that a civil suit against a Chinese citizen comes under the jurisdiction of the court at the place where the defendant is domiciled, or if not the same, under the jurisdiction of the people's court at the place of his regular abode, or residence.[469]

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[463] According to the related law, whatever their nationality, a lawsuit will be sued in the court of the stated of the defendant's domicile. In order to determine whether a party is domiciled in a contracting state, a court shall apply its domicile; in order to determine that seat the court shall apply its rules of private international law. For example, if the defendant's domicile is China, Chinese Court will apply the internal law rules and related Chinese private international law to determine the domicile.

[464] That is Nationality Principle.

[465] Article 244 - 245 of the Civil Procedure Law of the People's Republic of China.

[466] The Civil Procedure Law of the People's Republic of China provides a plaintiff with a choice where he may sue the defendant. The plaintiff can choose the place where the contract should be performed, or the place where the contract was signed or executed, or of the distrainable property, or of the place where the infringing conduct took place or where the representative office is located, to be the forum.

[467] Article 246 of the Civil Procedure Law of the People's Republic of China.

[468] It means China has jurisdiction over crimes happening within Chinese territory.

[469] Tan (2001).

3.4 Conclusion and Recommendation

As discussed earlier, the Internet lacks geographic boundaries, which makes it difficult to determine jurisdiction. Also given the countless ways in which contracting parties can hide or distort identifying personal or geographic information, it is no wonder that Internet anonymity poses especially difficult problems for determining the level of "contact" with the potential forum state under any contacts-based analysis.[470] Let's consider for example, a German website offering free music downloading services to users with a German area code only. Under these circumstances, users may be tempted to make false statements in order to use the service. This most telling example comes from the fact that filtering, websites and Internet service providers often design or filter content based on user location.[471] The geo-location of users sometimes demonstrates that Internet participant's activity target the user's jurisdiction or refrain from interacting with users located in particular places.[472]

The European Union's efforts in cyber jurisdiction have been identified as being different from American jurisdictional ideas. EU applies general and special jurisdiction of the Brussels I Regulation, whilst the US Courts, following the *International Shoe* case, focus on whether a defendant's activities constitute "minimum contacts" with a forum state,[473]

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[470] Boone (Spring 2006), 241, 247.

[471] Reidenburg (2005), 1951, p.1961.

[472] *Ibid*, p.1962.

[473] *International Shoe Co. v. Washington*, 326 U.S. 310 (1945).

as well as applying the Sliding Scale from the *Zippo* case that the Zippo Sliding Scale distinguishes between three broad categories of websites based on their interactive and commercial characteristics.[474]

The United States and European Union have fundamentally different philosophical approaches to jurisdiction. Whereas the American legal system embraces discretionary jurisprudence, European countries, and particularly civil law regimes, have always preferred more formal rules.[475] How to bridge the gap between the European and American views of jurisdiction, and how to provide a framework, which could facilitate the American and EU participation in a unified international jurisdictional system, are the key obstacles to electronic commercial transactions.

The common devices specifically used in transnational electronic contracts to limit liability and control the form and forum of the dispute are: arbitration clauses and forum selection clauses within browse-wrap and click-wrap agreements. Arbitration clauses, forum-selection clauses, and click and browse-wrap agreements are popular devices because they allow one or both of the parties to control some of the format and procedure of the dispute.[476] For example, arbitration may provide the parties the flexibility to stipulate choice of law provisions, or allow the arbitrator to choose the most appropriate

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[474] *Zippo Manufacturing Co. v. Zippo Dot Com, Inc.*, 952 F. Supp. 1119 (W. D. Pa. 1997).

[475] Boone (Spring 2006), 241, p.273.

[476] Clayton (2002), 223, p.235.

substantive law under the circumstances of the case. Click-wrap agreements are used to form binding user agreements and to establish the terms of online sales.

In my view, the targeting test of jurisdiction is common to the EU and US jurisdiction rules. Under a targeting analysis, jurisdiction would only be proper if a website directed its activities towards a particular forum. A targeting analysis would overcome the limitations of the passive versus active test and the effects test, and provide more certainty in Internet Jurisdiction disputes.[477] It is suggested that there are several factors to consider when determining if a website targets a jurisdiction. Foreseeability is central to the targeting analysis. The question is whether it could be foreseeable that the jurisdiction was targeted by the website at issue. In determining whether a website targets a jurisdiction, the court should look at the users' agreements, the language of the website, the currency accepted, the existence of pictorial suggestions and the disclaimers.[478]

The finalisation of the Hague Convention on Choice of Court Agreements is an achievement, which explicitly recognizes electronic means of communication. It regulates the jurisdiction of a chosen court[479] as well as judicial settlements.[480] For example, if an arbitration clause is included in an electronic contract, judicial settlements "which a court

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[477] Clayton (2002), 223, p.245.

[478] *Ibid*, p.246.

[479] Article 5 of the Convention on Choice of Court Agreements.

[480] Article 12 of the Convention on Choice of Court Agreements.

of a Contracting State designated in an exclusive choice of court agreement has approved, or which have been concluded before that court in the course of proceedings, and which are enforceable in the same manner as a judgment in the State of origin, shall be enforced under this Convention in the same manner as a judgment".[481] In my view, this Convention has achieved the harmonization of international jurisdiction rules, therefore, states shall be encouraged to ratify and sign it.

The UN Convention seems to be compatible with the targeting test. This is evidenced by Article 6. Article 6(4) provides that the location of the mail server or Internet service provider of a party does not necessarily constitute a place of business. Furthermore, Article 6(5) provides that the party using a country-specific domain name does not create a presumption that the place of business is located in that country. This disregards the "virtual domicile" of a party, that is, the electronic mailbox or Internet site and the creation of an artificial location as a "virtual domicile" could otherwise be taken advantage of to perpetrate commercial fraud.[482] Therefore, the location of the information system is not significant. This is intended to provide certainty, as information systems are accessible from anywhere in the world, and hence may avoid jurisdictional and conflict of law issues.

To sum up, factors in relation to Internet Jurisdiction rules should be considered: for

[481] Article 12 of the Convention on Choice of Court Agreements.

[482] Leng (2006), 234, p.239.

instance, parties are free to agree whose court has jurisdiction over contractual disputes in electronic contracts. Without a choice of court clause, when an e-contract dispute arises, the defendant should be sued in the courts where the defendant has his domicile, or continuous and systematic contacts. If the defendant's domicile is uncertain, an e-contract dispute should be under the jurisdiction of the courts in the place where: the contract is performed; the seller purposefully directs and targets his business activities, which is determined by the level of interactivity and commercial nature of the exchange of information on a website; or the defendant's action has effects.

4. Chapter Four

Choice of Law in E-Contracting

The problem with choice of law in electronic commerce cases is that different parties from various states often have competing interests in the application of their own substantive law. To avoid problems with regards to the applicable law, it is suggested that parties should include a choice of law clause in the contract. However, some electronic contracts do not have any choice of law provisions, thus creating the uncertainty about which country's law applies to the case. The purpose of this chapter is to examine how conventional choice of law doctrines in the EU, US and China are applicable to disputes arising out of electronic contracts, and to discuss how to resolve the electronic commerce choice of law dilemma at the international level.

4.1 International Dimension

With the ever increasing number of cross-border electronic commercial transactions, there are difficulties in devising suitable substantive law rules which respond to the global nature of the e-commerce market. Its tendency to delocalise transactions, will pose questions at the choice of law level.[483] A greater clarity about the choice of law would certainly contribute to an increased trust in the use of international e-commerce.

There are no specific instruments governing a choice of law clause in electronic contracts. However, the Convention on Contracts for the International Sale of Goods (Vienna Convention / CISG) has been partially applicable to electronic transactions, even though

[483] Fawcett, Harris & Bridge (2005), p.635.

not specifically designed for e-commerce. The CISG is an international agreement on uniform substantive rules governing international sales of goods. Several provisions of the CISG can be of particular use to recognise contracts concluded by electronic means: Article 11 provides that the contract can be concluded by any means, whereas Article 29 provides that the contract may be modified or terminated by agreement through any means, unless otherwise stated by the contract.[484] However, article 96 entitles states to be exempt from Article 11 or Article 29. The CISG is applicable to "contracts of sale of goods between parties whose places of business are in different States: (a) when the States are Contracting States; or (b) when the rules of private international law lead to the application of the law of a Contracting State".[485] For example, if A and B have their places of business in different CISG contracting states, when a dispute arises regarding the sale of goods, A or B's national court will hear the case on the basis of the CISG. This will be the case even if only one of the parties is based in a contracting state of the CISG.[486]

However, Article 6 of the CISG gives parties the opportunity to opt out of the CISG in part or entirely: "the parties may exclude the application of this Convention or, subject to article 12, derogate from or vary the effect of any of this provisions." Thus, for example, the parties (A in France and B in Germany), whose States are contracting states of the CISG,

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[484] Explanatory Note on the 1980 United Nations Convention on Contracts for the International Sale of Goods (CISG), p.43, http://www.uncitral.org/pdf/english/texts/sales/cisg/CISG.pdf (last visited 24 August 2007); see also Article 12 of the CISG.

[485] Article 1(1) of the United Nations Convention on Contracts For the International Sale of Goods (1980).

[486] Goode, Kronke & McKendrick (2007), P.264.

may insert a choice of law clause in their contract that "disputes shall be governed by the French Sale of Goods Act". In that case, French law should replace the CISG. Alternatively, if the choice of law clause between A and B states that "disputes shall be governed by the law of the vender's country", "disputes shall be governed by the law of the seller's country" or "disputes shall be governed by French law", either French law or the CISG can apply. Moreover, the CISG also allows contracting states to make a declaration or reservation under Article 95, whereby they may not want to be bound by Article 1(1)(b). Currently China and the United States and a few other States have ratified the Convention subject to a reservation excluding the Convention's application as a result of a choice-of-law reference,[487] which means "the CISG applies only when all the contracting parties have their place of business in states that have ratified the CISG".[488]

4.2 EU

Regarding Cyber choice of law, the location and timing of contract negotiation and communication play an important role in the applicable law analysis for contracts. Generally, the location, where contracting occurs, provides the substantive law that governs the agreement under the rules of private international law; hence, the place of contracting determines the outcome.

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[487] Scoles, Hay, Borchers & Symeonides (2000), p.901.

[488] Symeonides (Fall 2006), 697, p.757.

In the EU, the EC Directive on Electronic Commerce does not include a choice of law provision, but there is a "country of origin" principle. It refers to the applicable law for service providers, stating that "each Member State shall ensure that the information society services provided by a service provider established on its territory comply with the national provisions applicable in the Member State in question which fall within the coordinated field",[489] which relates to "online activities", such as "online information, online advertising, online shopping, and online contracting".[490] The "country of origin" principle aims to regulate the conduct of service providers in general, but not specifically contracting parties in electronic transactions. Thus, the "country of origin" principle does not affect the application of the law chosen by the parties to govern a contract.[491]

Another instrument in the EU, the Rome Convention of 1980 (the Rome Convention),[492] which is an international agreement on uniform conflict of law rules in contract, does not either specifically deal with electronic commercial transactions. However, it provides the provisions relating to the choice of law rules for reference in online contracting. Those rules can be divided into several key elements: Firstly, Article 3 and 4 are the core provisions of the Convention. Article 3 deals with the applicable law chosen by the parties while Article 4 contains the provisions for ascertaining the applicable law in the absence of

[489] Article 3(1) of the EC Directive on Electronic Commerce.

[490] Recital 21 of the EC Directive on Electronic Commerce.

[491] Fawcett, Harris & Bridge (2005), p.1233, see also Annex 3 of the EC Directive on Electronic Commerce.

[492] The Convention on the Law Applicable to Contractual Obligations (The Rome Convention 1980), latest consolidated version, 30.12.2005, Official Journal of the European Union, C334/1.

choice. Secondly, there are provisions dealing with the mandatory rules of the forum (or of another country) or public policy. Thirdly, choice of law rules applies to specific aspects of a contract, such as material and formal validity, interpretation, performance and the quantification of contractual damages.

The following section will introduce the Rome Convention, mainly discussing the applicable law in cases of choice and in absence of choice regarding B2B electronic contracts, as well as the further development of the Convention.

4.2.1 Scope and Aims of the Rome Convention

Article 1 of the Rome Convention sets out the Convention's material scope: "The rules of this Convention shall apply to contractual obligations in any situation involving a choice between the laws of different countries." The material scope of the Convention, as defined by the first paragraph of Article 1, is limited by the exceptions set out in the second, third and fourth paragraphs. Article 1(2)(a) excludes "questions involving the status or legal capacity of natural persons". This is, however, subject to the limited exception in Article 11. Subparagraph (b) goes on excluding all remaining questions of family law: wills and succession; rights in property arising out of a matrimonial relationship; and rights and duties arising out of a family relationship.[493] The terminology of paragraph (a) and (b)

[493] Article 1(2)(b) of the Rome Convention.

corresponds to the equivalent provisions of Article 1 of the Brussels I Regulation.[494] Concerning the territorial scope, Article 2 of the Convention provides: "Any law specified by this Convention shall be applied whether or not it is the law of a Contracting State." This is of universal application.

For the purposes of the Rome Convention, there are two possible types of contract that can be made over the Internet: one in which the law that will govern the contract is agreed, and one in which it is not.

4.2.2 The Applicable Law in Cases of Choice

Freedom of Choice: Party Autonomy

Article 3(1) embodies the principle of party autonomy: "A contract shall be governed by the law chosen by the parties. The choice must be expressed or demonstrated with reasonable certainty by the terms of the contract or the circumstances of the case." Most cases are entirely straightforward, since the parties simply agree that the contract is to be governed by the law of a particular country.[495] Even if not expressed in the contract, in some circumstances, the parties' choice may be implied. Whether the parties' choice of law is expressed or implied, the effects will be the same as mentioned in the Giuliano - Lagarde Report: "the Convention recognizes the possibility that the court may, in the light of all the

[494] Hill (2005), p.465.

[495] *Ibid*, p.472.

facts, find that the parties have made a real choice of law although this was not expressly stated in the contract."[496] It is, however, important to distinguish cases of implied choice, which fall within Article 3(1), from cases in which the parties have clearly failed to make a choice, which are governed by Article 4.

Other Methods of Express or Implied Choice

Previous course of dealing,[497] dispute resolution clauses[498] and related transactions[499] can also be taken into account to determine the applicable law in cases of choice. A previous course of dealing between the parties in contracts containing an expressed choice of law may leave the court in no doubt that the contract in question is to be governed by the law previously chosen where the choice of law clause has been omitted in circumstances which do not indicate a deliberate change of policy by the parties.[500]

In the course of electronic contracting, as we discussed in Chapter Two, standard forms have been widely used. However, an e-contract may be in "standard form which is known to be governed by a particular system of law even though there is no expressed statement

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[496] [1980] OJ C82/17 cited from Hill(2005), p.473.

[497] Hill(2005), p.476.

[498] *Ibid.*

[499] *Ibid*, p.479.

[500] Giuliano – Lagarde Report, [1980] OJ C282/1, p.17 available at http://www.rome-convention.org/instruments/i_rep_lagarde_en.htm (last visited 23 August 2007).

to this effect."[501] For example, in the absence of evidence of a common intention to choose any law, the e-contract was of a standard type and has been made between seller who is located in California and the buyer who is located in Germany. If the seller and buyer had previous disputes, which were resolved by California law, then it is sufficient to indicate that the parties had implicitly intended Californian law to govern the contract.

In addition, many contracts contain a dispute-resolution clause, either a jurisdiction clause or an arbitration agreement. But in what circumstances is a choice of the courts of country A (or a choice of arbitration in country A) to be treated as an implied choice of the law of country A? The Giuliano – Lagarde Report is of limited assistance: "In some cases the choice of a particular forum may show in no uncertain manner that the parties intend the contract to be governed by the law of the forum, but this must always be subject to the other terms of the contract and all the circumstances of the case. Other matters that may impel the court to the conclusion that a real choice of law has been made, might include the choice of place where disputes are to be settled by arbitration in circumstances indicating that the arbitrator should apply the law of that place."[502]

Furthermore, on one e-business website, it may involve a large amount of related transactions. The Giuliano – Lagarde Report accepts the idea that a choice may be implied

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[501] Giuliano - Lagarde Report, [1980] OJ C282/1, p.17.

[502] *Ibid.*

into a contract from "an express choice of law in related transactions between the same parties".[503] For instance, where there is an express choice of law in an e-contract between A and B, it is possible to imply a choice for another related e-contract between B and A on the basis that the parties must have intended or assumed that the transactions would be governed by the same law.

Extension of Party Autonomy

Contracts frequently contain different obligations, so the parties must have freedom of subjecting the different obligations to different laws. That is known as "splitting the applicable law".[504] This may be divided up into four different categories: first, it is possible to apply different laws to different aspects of the same obligation; secondly, different terms of one contract may be governed by different laws;[505] thirdly, different groups of obligations may be governed by different laws;[506] fourthly, the obligations of each party may be governed by a different law.[507]

Moreover, parties must have freedom to re-choose their chosen law. This is supported by Article 3(2) of Rome I, which it provides: "The parties may at any time agree to subject the contract to a law other than that which previously governed it, whether as a result of an

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[503] Giuliano – Lagarde Report, [1980] OJ C282/1, p.17.

[504] Hill (2005), p.481.

[505] Giuliona – Lagarde Report, [1980] OJ C282/1, p.17.

[506] Lando (1987), 159, p.168.

[507] McLachlan (1990), 311.

earlier choice under this Article or of other provisions of this Convention. Any variation by the parties of the law to be applied made after the conclusion to the contact shall not prejudice its formal validity under Article 9 or adversely affect the rights of third parties." By virtue of this provision, the parties may, having included a choice of law clause in their contract, subsequently decide to change the applicable law by a new mutual agreement. Alternatively, in a situation where the contract does not include a choice of law, the parties may agree on the applicable law at some later stage. If parties are free to decide on the applicable law, there is no reason why they should not be able to change it.[508]

In my opinion, the recognition of electronic means adopted by the Choice of Court Convention should also be used in Choice of Law. The rules concerning the choice of law in the online world can best be explained by the most recent international legislation: the UN Convention on the Use of Electronic Communications in International Contracts (the UN Convention). In the electronic commerce environment, parties have the same freedom to include a choice of law clause when concluding contracts online, because the UN Convention explicitly employs "party autonomy" in the choice of a party's place of business. Thus, party autonomy is the core principle of the UN Convention. Furthermore, parties can amend their choice of law clause. The new choice of law clause that parties agree will not affect the validity of the contract. The provision of "error in electronic

[508] Hill(2005), p.482.

communications"[509] in the UN Convention supports the above principle. It provides that the information system should provide the other party with an opportunity to correct the input error. Thus, parties might have an opportunity to add or amend a choice of law clause in the "addition information" or "comments" space box on the website, or they might enclose or upload a document expressing the intention to change the applicable law, or they might put forward another email followed by their transaction noticing the amendment of the applicable law. However, that, which party's proposal prevails, also depends on the rules of battle of forms previously discussed in Chapter Two.

4.2.3 The Applicable Law in Absence of Choice

Closest Connection

In the absence of a choice of law clause, the determination of the applicable law can be very complicated. The Rome Convention provides that the law of the country where the contract is most closely connected will govern the contract. Article 4 (1) provides that: "To the extent that the law applicable to the contract has not been chosen in accordance with Article 3, the contract shall be governed by the law of the country with which is most closely connected. Nevertheless, a separable part of the contract which has a closer connection with another country may by way of exception be governed by the law of that other country." The general principle of "the closest connection" is therefore established.

[509] Article 14 of the UN Convention on the Use of Electronic Communications in International Contracts (the UN Convention).

However, the flexibility of the general principle established by Article 4(1) is substantially modified by the presumptions in paragraphs 2, 3 and 4.[510]

Article 4(2) of the Rome Convention applies to all contracts falling within the scope of Article 4 other than contracts related to the immovable property and the carriage of goods. Article 4(2) states: "subject to the provisions of paragraph 5 of this Article,[511] it shall be presumed that the contract is most closely connected with the country where the party who is to effect the performance which is characteristic of the contract has, at the time of conclusion of the contract, his habitual residence, or, in the case of a body corporate or unincorporate, its central administration. However, if the contract is entered into in the course of that party's trade or profession, that country shall be the country in which the principal place of business is situated or, where under the terms of the contract the performance is to be affected through a place of business other than the principal place of business, the country in which that other place of business is situated."

There are two main considerations in Article 4(2): firstly, characteristic performance is in principle the relevant factor in applying the presumption for determining the applicable

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[510] Giuliona – Lagarde Report, [1980] OJ C282/1, p.38.

[511] Article 4(5) of the Rome Convention states:

"Paragraph 2 shall not apply if the characteristic performance cannot be determined, and the presumptions in paragraph 2 to 4 shall be disregarded if it appears from the circumstances as a whole that the contract is more closely connected with another country."

law;[512] secondly, the factor of characteristic performance is determined "at the time of conclusion of the contract". Characteristic performance of the contract refers to the performance, which constitutes the essence of the contract. The nationality of the contracting parties or the place where the contract was concluded should not be the elements relating to the essence of the obligation. Where the party has habitual residence, its central administration, or his principal place of business should be the essential factors to determine the country in which the party performs his obligation. Thus, for instance, in a commercial contract of sale, the law of the vender's place of business will govern the contract.[513] However, is there any difference in determining characteristic performance of the contract between online and offline?

As discussed in Chapter Three, there are two main types of B2B electronic transactions, one is selling tangible or digitised goods online with physical delivery or providing services online with physical performance, the other is selling digitised goods with delivery over the Internet or providing digitised services online. A contract concluded by electronic means with physical delivery of goods does not make any difference from a contract concluded offline, because it won't affect the determination of the place of performance, i.e. the place of delivery. Thus, the focus in this section will be on the transfer of digitised products.

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[512] Giuliona – Lagarde Report, [1980] OJ C282/1, p.40.

[513] *Ibid*, p.39.

When transferring digitised goods over the Internet, there are four possible connecting factors when determining the place of performance of the contract: firstly, the place where digitised goods are dispatched by the seller (i.e. the place of uploading); secondly, the place where digitised goods are received by the buyer (i.e. the place of downloading); thirdly, the place where the recipient has his place of business; lastly, the place where the seller (sometimes, sellers can be service providers at the same time, if sellers establish their own server) has his place of business. Because the seller can upload digitised goods anywhere in the world, the place of uploading is not sufficient to show that the performance of contract is most closely connected to the country where the digitised goods are uploaded. The same effect will apply to the buyer, because the digitised goods can be downloaded without any restriction to the place of delivery. Therefore, the most realistic factor to determine the place of performance will be the place of business. But whose place of business is most closely connected with the country where the performance of the contract is to be affected?

The seller's place of business should be regarded as the closest connection, since, according to the UN Convention on the Use of Electronic Communications on International Contracts, the place of business cannot be the place where technology equipments such as computers or servers are located or where information can be

accessed.[514] The seller's place of business has an enduring connection with the contract, because it is not temporary and it has effects on his past, present and future business. But how can the seller's place of business on the Internet be determined, as he might not have a physical place of business? In these circumstances, the seller's place of business should be the place where he/she targets the market and has an economic and social impact.

Let us look at the following example to illustrate the problems: Will a business with its central administration in State X which does business via the Internet using a website located in State Y (with no further connections to that State) be regarded as effecting performance through a place of business in State Y?[515] The mere fact that the service provider uses a website to promote its goods or digitised products does not in itself create a place of business.[516] However, if the service provider has its own server located in State Y, from which it concludes contracts of sale, would matters be different?

The answer is no, because a location is not a place of business merely where the technology and equipment supporting the electronic transactions are located.[517] However, if the website in State Y is an interactive one which allows customers to contract online,

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[514] Article 6(4) of the UN Convention on the Use of Electronic Communications on International Contracts (the UN Convention).

[515] *Matchnet v. Blair* [2002] EWHC 2128 (ch), [2003] 2 BCLC 195, cited from Fawcett, Harris & Bridge (2005), p.1239.

[516] Article 6(4)(b) of the UN Convention.

[517] Article 6(4)(a) of the UN Convention.

rather than a passive channel of communication, then there is a solid argument in favour of the claim that the company has a place of business in State Y. In addition, under the terms of the contract, if the performance is to be effected through a place of business in State Y rather than the principal place of business in State X (the country in which that other place of business is situated), then the law of State Y shall govern the contract.

Let us assume that if a company A which is based in State X uses the website of another company B which is based in State Y and has its server located in that State, which country's law will apply when A sells goods online? From this presumption, State X is company A's principal place of business. But if the company uploads digitised product, stores it and transfers it in State Y, and it has an enduring connection with State Y, the law of State Y will govern, because the performance of contract is affected through State Y other than the principal place of business X.[518] However, if the buyer orders the products while company A is temporarily situated in a third State Z, when any dispute arises, the law of State X will govern the contract since it is his principal place of business.

Following the above analysis, in the absence of choice, the law applicable to a contract under the Rome Convention will normally be that of the seller's principal place of business. This principle applies to contracts concluded online in the absence of choice of the applicable law.

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[518] Fawcett, Harris & Bridge (2005), p.1244, 1249. See Article 4(2) of the Rome Convention.

In my opinion, Article 4(2) of the Rome Convention is incompatible with Article 6(2) of the UN Convention on the Use of Electronic Communications on International Contracts. Whereas under Article 4(2) of the Rome Convention the contract is presumed to be most closely connected with the country "***at the time of conclusion*** of the contract", Article 6(2) of the UN Convention and Article 10(a) of the CISG provide that the place of business is where it has the closest relationship to the relevant contract "***at any time before or at the conclusion*** of the contract". In my view, the latter principle is in practice more appropriate to be applied in the online world, because it is much more difficult to identify the place of business when concluding an electronic contract online than offline. The Internet is borderless and placeless. To determine a party's place of business for electronic transactions, it is more sensible to examine his/her continuous business behaviours and locations, from before the conclusion of the contract, to at the conclusion of the contract. The place of business for electronic commerce users is sometimes not physically located, which is the same consideration as we discussed about Internet jurisdiction in Chapter Three, that the place of business should be connected with "minimum contacts", "purposefully targeting" and "effects", whilst the place of business in the offline world can be situated in immovable properties.

4.2.4 Proposal for the Rome I Regulation

The European Economic and Social Committee and the European Parliament is in favour of converting the Rome Convention of 1980 into a Community Regulation and

modernizing certain provisions of the Rome Convention, making them clearer and more precise. The proposal for a "Regulation of the European Parliament and the Council on the Law Applicable to Contractual Obligations (Rome I),[519] was finally adopted by the Commission on 15 December 2005 in Brussels. The Vice-President said: "By providing foreseeable and simplified rules, the Rome I proposal on the law applicable to contracts will enable Europe's citizens and firms to make more of the possibilities offered by the internal market."[520] The proposed Regulation of Rome I aims to reinforce two core principles of the Rome I Convention, freedom of choice and the applicable law in absence of choice.

Article 3 of the Rome I Regulation attempts to strengthen the freedom of parties in the business world to choose the law applicable to the relationship between them. According to Article 3(2), it provides that the parties are allowed to "choose as the law applicable to their relationship rules not originating in internationally recognized private codifications (UNIDROIT Principles, Vienna Convention on the International Sale of Goods), thus upholding a practice that has become common since 1980".[521]

With regards to the applicable law in the absence of choice, according to Article 4(1) of the

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[519] Proposal for a Regulation of the European Parliament and the Council on the Law Applicable to Contractual Obligations (Rome I), Brussels, 15.12.2005, COM(2005) 650 final 2005/0261 (COD).

[520] "Adoption of two Commission Proposals is a vital step in completing the European law – enforcement area for individuals and firms, IP/05/605, Brussels, 15 December 2005.

[521] Rome I Proposal, MEMO/05/483, Brussels, 15 December 2005, p.2.

Rome Convention, the law of the country where it is most closely connected governs the contract. The closest connection is a vague formula because it leaves it to the courts to weigh up the factors that determine the "centre of gravity" of the contract.[522] To consolidate certainty, Article 4(2) of the Convention establishes a general presumption that "the contract is most closely connected with the country where the party who is to effect the performance which is characteristic of the contract, his habitual residence." The Rome I Regulation deleted Article 4(1) of the Rome Convention, replacing by more precise rules whose "proposed changes seek to enhance certainty as to the law by converting mere presumptions into fixed rules and abolishing the exception clause".[523] For a contract of sale or the provision of services, the Rome I Regulation has reserved the rule in the Rome Convention whereby the applicable law is the law of the place where the party performing the service characterizing the contract has his habitual residence.[524] It provides that "a contract of sale shall be governed by the law of the country in which the seller has his habitual residence".[525] Where characteristic service of the contract cannot be identified, the contract "shall be governed by the law of the country where it is most closely connected".[526] As illustrated above, Article 4 of the Proposal aims to specify the rules

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[522] "Green Paper on the Conversion of the Rome Convention of 1980 on the law applicable to contractual obligations into a Community instrument and its modernisation" (thereafter "Green Paper"), COM (2002) 654 final, Brussels 14.1.2003, Commission of the European Communities, p.25, available at http://eur-lex.europa.eu/LexUriServ/site/en/com/2002/com2002_0654en01.pdf (last visited 25 August 2007).

[523] Proposal for the Rome I Regulation, p.5.

[524] Article 4(1) of the Proposal for the Rome I Regulation.

[525] Article 4(1)(a) of the Proposal for the Rome I Regulation.

[526] Article 4(2) of the Proposal for the Rome I Regulation.

applicable, in the absence of a choice, as precisely and foreseeably as possible so that the parties can decide whether or not to exercise their choice. To assist the application of Article 4, the Proposal also inserted a new provision of the interpretation of "habitual residence" under Article 18, which is identical to Article 4(2) of the Rome Convention. Article 18(1) of the Proposal provides that the principle establishment of companies shall be considered to be the habitual residence, or the habitual residence will be deemed to be the one of a subsidiary/branch, if the contract was made in the course of operation or performance was the responsibility of that subsidiary/branch. The difference from the Rome Convention is that Article 18(2) of the Proposal provides that "where the contract is concluded in the course of the business activity of a natural person, the natural person's establishment shall be considered the habitual residence", whilst the Article 4(2) of the Rome Convention would determine it as the principal place of business.

So is amending the Rome Convention necessary? I agree with the recommendation of the International Chamber of Commerce to the European Commission that the principle "if it is not broken, don't fix it" should be the preferred approach when examining the Rome Convention.[527] However, the inclusion of more precise and specific provisions might help

[527] "ICC Comments on the European Commission's Green Paper on the Conversion of the Rome Convention of 1980 on the law applicable to contractual obligations into a Community instrument and its modernization", Department of Policy and Business Practices, Commission on Commercial Law and Practices, 3 October 2003 JA/ef, Document 373-33/8, p.1,(thereafter "Document 373-33/8"), available at http://ec.europa.eu/justice_home/news/consulting_public/rome_i/doc/international_chamber_commerce_en.pdf (last visited 25 August 2007);

facilitating choice of law issues. I think the focal point to reform the Rome Convention should be to consider the worldwide reach and access feature of electronic transactions, which is different from traditional offline transactions in terms of determining the habitual residence, central administration or place of business when ascertaining the applicable law in absence of choice.

I recommend that the Rome I Regulation should enclose another two subsections under Article 4(1), for example, Article 4(1)(l)&(m):[528] the first one should focuse on determining the applicable law for E-Commerce / Internet service providers, and the other one should ascertain the online contracting parties' place of business. Firstly, as discussed at the beginning of Section 4.2, the EC Directive on Electronic Commerce is based on a country of origin principle that "in order to effectively guarantee freedom to provide services and legal certainty for suppliers and recipients of services, such information society services should in principle be subject to the law of the Member State in which the service provider is established".[529] Since the certainty provided by the country of origin principle is vital for the functioning and progress of the EU internal market, EuroISPA ("European Internet Services Providers Association") urges the European Commission to

[528] Article 4(1)(a)-(k) has been included in the Proposal for a Regulation of the European Parliament and the Council on the Law Applicable to Contractual Obligations (Rome I), the Council of the European Union, 13853/06, LIMITE, JUSTCIV 224, CODEC 1085, Brussels, 12 October 2006.

[529] Recital 21 of the EC Directive on Electronic Commerce.

incorporate this principle into the Rome I Community instrument.[530] Secondly, the law of the country where the seller has his place of business should govern a contract of sale or for the provision of services with performance online.

With regards to requirements as to form, however, the Proposal has not yet set out expressly the "function equivalent" rule for electronic mails. The International Chamber of Commerce (ICC) and the United Kingdom government responded to the Green Paper on the conversion of the Rome Convention into a Community instrument[531] (thereafter, "Green Paper") on whether Article 9 of the Rome Convention[532] should be reformed. They considered that Article 9 adequately covered contracts concluded by e-mail, thus, there

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[530] EuroISPA Position Paper "Green Paper on the Conversion of the Rome Convention into a Community Instrument: COM(2002)654", September 2003, available at http://ec.europa.eu/justice_home/news/consulting_public/rome_i/doc/euroispa_en.pdf (last visited 25 August 2007).

[531] "Green Paper on the Conversion of the Rome Convention of 1980 on the law applicable to contractual obligations into a Community instrument and its modernisation", COM (2002) 654 final, Brussels 14.1.2003, Commission of the European Communities, available at http://eur-lex.europa.eu/LexUriServ/site/en/com/2002/com2002_0654en01.pdf (last visited 25 August 2007).

[532] According to Article 9 of the Rome Convention, it governs formal validity by providing:

"1. A contract concluded between persons who are in the same country is formally valid if it satisfies the formal requirements of the law which governs it under this Convention or of the law of the country where it is concluded.

2. A contract concluded between persons who are in different countries is formally valid if it satisfies the formal requirements of the law which governs it under this Convention or of the law of one of those countries.

3. Where a contract is concluded by an agent, the country in which the agent acts is the relevant country for the purposes of paragraphs 1 and 2.

4. An act intended to have legal effect relating to an existing or contemplated contract is formally valid if it satisfies the formal requirements of the law which under this Convention governs or would govern the contract or of the law of the country where the act ***was done***."

should be no need to modify this article.[533] Because a contract concluded by email in the same country or different countries shall be valid if it satisfies the formal requirements of the law of either of those countries. According to the Green Paper, "as regards contracts concluded at a distance (by fax, mail or e-mail, for example), there is a place of conclusion for each party in the contract, which further multiplies the chances that the contract, which further multiples the chances that the contract is valid as to form. This solution has made it unnecessary to take a more or less artificial decision on the location of a contract between distant parties."[534] However, Article 9 was drawn up before electronic contracts came into common practice, thus, the determination of the place of conclusion is different from that of offline. According to the UN Convention on the Use of Electronic Communications in International Contracts, the place of dispatch or receipt of an electronic communication is the place where the party has its place of business,[535] but if the party does not have a place of business, reference should be made to his habitual residence.[536] It might be advisable for Article 9 to contain an additional rule by adding the law of the country where either of the parties has its habitual residence. It would thus constitute three laws to formal requirements as to form: the law which governs it under this Regulation; the law of the

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[533] Document 373-33/8, p.6; "Response of the Government of the United Kingdom", p.8, available at http://ec.europa.eu/justice_home/news/consulting_public/rome_i/doc/united_kingdom_en.pdf (last visited 25 August 2007).

[534] Green Paper, p.39, COM (2002) 654 final, Brussels 14.1.2003.

[535] Article 10(3) of the UN Convention.

[536] *Ibid*, Article 6(3).

country of the place of conclusion; and the law of either party's of habitual residence.[537]

The Commission of the European Communities amended Article 9 of the Rome Convention in Article 10 of the Proposal for a Regulation of the European Parliament and the Council on the law applicable to contractual obligations (Rome I),[538] adding "habitual residence" as a linking factor. The Council of the European Union recommended further amendments to the wording of Article 10, which is more accurate but without substantially changing the content. It provides that:

> "1. A contract is formally valid if it satisfies the formal requirements of the law which governs it in substance under this Regulation or the law of the country where ***either*** of the parties or ***their agent*** is present when it is concluded or the law of the country where ***either*** of the parties had his ***habitual residence*** at that time.
>
> 2. A unilateral act intended to have legal effect relating to an existing or

[537] As stated in the Green Paper "It will be enough, therefore, for the statement to satisfy the formal requirements of one of the three laws to be valid as to form. This rule will apply without discrimination to contracts concluded by electronic means and to other contracts concluded at a distance", p.39, COM(2002) 654 final, Brussels 14.1.2003.

[538] Article 10 of the proposal regulates the formal validity, providing:

"1. A contract is formally valid if it satisfies the formal requirements of the law which governs it in substance under this Regulation or the law of the country in which one or other of the parties or his agent is when it is concluded or the law of the country in which one or other of the parties has his ***habitual residence*** at that time.

2. A unilateral act intended to have legal effect relating to an existing or contemplated contract is formally valid if it satisfies the formal requirements of the law which governs or would govern the contract in substance under this Regulation or of the law of the country in which the act ***is performed*** or the law of the country in which the person who ***drafted*** it has his habitual residence at that time."

contemplated contract is formally valid if it satisfies the formal requirements of the law which governs or would govern the contract in substance under this Regulation or of the law of the country where the act ***was done*** or the law of the country where the person who ***effected*** it had his habitual residence at that time."[539]

In my view, there is one more subsidiary rule that should be addressed in Article 10 of Rome I: it is necessary for the Proposal that a choice of law clause should be valid both in writing and by electronic means. Employing a provision from Article 3(c) of the Choice of Court Convention, it can be proposed that:

"A choice of law agreement can be concluded or documented:

1) in writing; or

2) by any other means of communication which renders information accessible so as to be usable for subsequent reference;"[540]

With regards to applicable law in electronic contracts, to determine the applicable law in absence of choice is a two-stage exercise: firstly, to ascertain the seller's habitual residence; secondly, if the seller's habitual residence can not be determined, the court will identify the

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[539] Article 10 (1) and (2) of the Proposal for a Regulation of the European Parliament and of the Council on the law applicable to contractual obligation (Rome I), Council of the European Union, 13853/06, LIMITE, JUSTCIV 224, CODEC 1085, Brussels, 12 October 2006.

[540] Employed from Article 3(c) of the Choice of Court Convention.

characteristic performance of the contract, the country of the party who is to effect it and to determine the law which is most closely connected to the contract. Compared to the Rome Convention, which starts with the close connection principle, the Rome I Proposal explicitly expresses that "the contract shall be governed by the law of country in which the seller has his habitual residence".[541] Thus, the Rome I Proposal is more precise for parties to determine the applicable law.

4.3 US

Just like what has been discussed in Section 4.2, the difference in determining applicable law to online commercial transactions from offline is only when transactions involve digitised goods with electronic delivery. Unlike the EU, the US has a special provision governing choice of law in an uniform commercial code "Uniform Computer Transactions Act" (UCITA). Although the UCITA only applies to computer information transactions such as computer software, online databases, software access contracts or e-books[542] involving licensing contracts, the choice of law provision of the UCITA can be learned or adopted to the determination of the applicable law in general electronic contracting for the reason that the feature of concluding contracts with transferring products online will be identical to that of transacting computer information. Lacking choice of law provisions to electronic contracts in US electronic commerce legislations, traditional uniform

[541] Article 4(1)(a) of the Rome I Proposal.

[542] Section 103 of the Uniform Computer Information Transactions Act.

commercial laws, such as the Uniform Commercial Code (UCC) and the Second Restatement, have to be employed to determine applicable law to contracts concluded and performed electronically.

Similar to the EU, there are two core doctrines in ascertaining applicable law, freedom of choice and in absence of choice. Freedom of choice is so called "party autonomy" is the fundamental rule. It means that the parties are free to select the law governing their contract, subject to certain limitations.[543] Party autonomy is recognized by §109(a) of Uniform Computer Information Transactions Act (UCITA), §187 of the Second Restatement and the case law adopting it[544] as well as by §1-105 of the Uniform Commercial Code.[545] In the absence of parties' choice, §109 of UCITA and §188 of the Second Restatement deal with it.

4.3.1 The Applicable Law in Cases of Choice

With regards to the applicable law in cases of choice, § 1-105 of the Uniform Commercial Code provides that "the parties may agree that the law either of this state or of such other state or nation shall govern their rights and duties." §187(1) of the Second Restatement also provides that "The law of the state chosen by the parties to govern their contractual rights and duties will be applied if the particular issue is one which the parties could have

[543] Scoles, Hay, Borchers & Symeonides (2000), p.858.

[544] *Valley Juice Ltd., Inc. v. Evian Waters of France, Inc.*, 87 F 3d 604 (2d Cir. 1996).

[545] Scoles, Hay, Borchers & Symeonides (2000), p.861.

resolved by an explicit provision in their agreement directed to that issue." §187(2) of the Second Restatement further requires that the party's choice should have a close relationship either to them or to the transaction, or there should be a "reasonable basis", and not be contrary to "a fundamental policy of a state".[546] The UCITA expressly deals with choice of law issues. Section 109(a) of the UCITA states that "parties in their agreement may choose the applicable law", but such choices are not enforced if, they are determined to be unconscionable.[547] Under Section 105(b), a court will also refuse to recognize the chosen law if it violates the fundamental public policy of the forum state.

As illustrated above, it is similar to the Rome Convention in the EU that the US laws favour and respect the election of the applicable law by contracting parties, however, the limitation of freedom of choice in the EU and US is different in two aspects: Firstly, the US requires the state of the choice of law must have a substantial relationship to the parties or transactions with a reasonable basis, whilst the EU does not require for the chosen law to have any real connection with the parties or the subject matter of their contract[548];

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[546] (2) The law of the state chosen by the parties to govern their contractual rights and duties will be applied, even if the particular issue is one which the parties could not have resolved by an explicit provision in their agreement directed to that issue, unless either (a) the chosen state has no substantial relationship to the parties or the transaction and there is no other reasonable basis for the parties' choice, or (b) application of the law of the chosen state would be contrary to a fundamental policy of a state which has a materially greater interest than the chosen state in the determination of the particular issue and which, under the rule of §188, would be the state of the applicable law in the absence of an effective choice of law by the parties.

[547] Mazzotta (Summer 2001), 249, p.252.

[548] *Vita Food Products Inc. v. Unus Shipping Co. Ltd* [1939] A.C. 277, cited from Morris, McClean & Beevers (2005), p.343.

Secondly, in the US, the Second Restatement excludes the choice of law if it contradicts the "fundamental policy" of the state whose law would be applicable to the contract in the absence of any choice by the parties, whilst in the EU, the Rome Convention prevents the parties to opt out of the mandatory rule. To illustrate the "mandatory rules" of the Rome Convention, if contracting parties A and B choose the law of Country B as their governing law, but the law of Country A contains mandatory rules, the mandatory rules of Country A will override any different rule in the law of Country B.

The basic methodology in choice of law is to characterize the issue or question to fit into a category, to determine the connecting factor for that category, and then to apply the law indicated by that connecting factor.[549] Many disputes involving e-commerce arise between parties who are bound by a contract that specifies the terms and conditions upon which they have agreed to interact. Frequently, the contract itself may provide that any dispute arising from it is to be heard in the courts of a specified state (i.e., Choice of forum or forum selection clause) and is to be determined under the substantive laws of a specified state (i.e., choice of law clause).[550] Generally, contracting parties will choose the applicable law on the basis of the place of contract formation, the place of performance, domicile or the state of incorporation, corporate headquarters and branches.

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[549] Yeo (2004), p.1.

[550] Rice (Fall 2000), p.608.

It may be difficult to determine whether the parties have genuinely consented to a choice of a particular law which appears as a standard term on the seller's website and which might not be immediately visible to the buyer. It becomes therefore a primary concern that a choice-of-law clause contained on an Internet site, or included in an email, was sufficiently visible and actually represents the bilateral consent of the parties. Take a click-wrap agreement as an example: A choice of law clause is included by the seller on his website but is not directly visible on screen and can only be seen when scrolling down the screen or clicking on a separate link. The seller alleges that the buyer consents to the clause when he concludes the contract, even though he never properly reads that clause. –So can it be deemed to be lack of parties' consent? If the seller performs his duty of making a contract available online,[551] that is, the buyer can get back to the terms and conditions on the website any time he wants (even after the contract is concluded), then it will be the buyer's responsibility to make sure the choice of law clause before he clicks the "I agree" button. Once clicking the "I agree" button, the parties will be deemed to be consent to the terms and conditions.

4.3.2 The Applicable Law in Absence of Choice

Section 1-105 of the Uniform Commercial Code provides that in absence of a choice of law agreement "this Act applies to transactions bearing an appropriate relation to this state". Under §188 of the Second Restatement, where a choice of law provision is absent from a

[551] Article 9(4) of the UN Convention.

contract, the court has to determine whether to apply the substantive laws of one state over another in resolving the issues presented before it. Section 188 (1) of the Second Restatement determines the applicable law in Absence of Effective Choice by the Parties, providing that "The rights and duties of the parties with respect to an issue in contract are determined by the local law of the state which, with respect to that issue, has ***the most significant relationship*** to the transaction and the parties under the principles stated in § 6.[552] Section 188 (2) of the Second Restatement further provides the connecting factors in determining the applicable law in the absence of choice, including "(a) the place of contracting, (b) the place of negotiation of the contract, (c) the place of performance, (d) the location of the subject matter of the contract, and (e) the domicile, residence, nationality, place of incorporation and place of business of the parties. These contacts are to be evaluated according to their relative importance with respect to the particular issue." According to § 188 (3), the local law of this state will usually be applied, if the place of

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[552] Section 6 of the Second Restatement - the Choice of Law Principles:

(1) A court, subject to constitutional restrictions, will follow a statutory directive of its own state on choice of law.

(2) When there is no such directive, the factors relevant to the choice of the applicable rule of law include

(a) the needs of the interstate and international systems,

(b) the relevant policies of the forum,

(c) the relevant policies of other interested states and the relative interests of those states in the determination of the particular issue,

(d) the protection of justified expectations,

(e) the basic policies underlying the particular field of law,

(f) certainty, predictability and uniformity of result, and

(g) ease in the determination and application of the law to be applied.

negotiating the contract and the place of performance are in the same state.[553]

Furthermore, both the Second Restatement, in Section 191, and the Uniform Commercial Code (UCC), in Section 1-105(1) in combination with Section 2-401, deal with the sale of goods. The Restatement provides, subject to the usual exception in favour of an express choice by the parties or a more significantly related law, that the law of the place should be applied "where under the items of the contract the seller is to deliver the chattel". The UCC, Section 1-105(1) provides for the application of forum law whenever the transaction bears an "appropriate relation" to the forum.[554]

However, while Section 188 governs contracts of sale for both goods and services, Section 191 specifically regulates the sale of goods. Section 204 provides, for all contracts, that a contract should be construed under the law generally applicable under §188 (the place of the most significant relationship). Section 191 provides a reference to the place of delivery that the "validity of a contract for the sale of an interest in a chattel and the rights created thereby are determined, in the absence of an effective choice of law by the parties, by the local law of the state where under the terms of the contract the seller is to deliver the chattel unless, with respect to the particular issue, some other state has a more significant relationship under the principles stated in §6 to the transaction and the parties, in which

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[553] Except as otherwise provided in § 189-199 and 203, provided by § 188 (3) of the Second Restatement.

[554] Scoles, Hay, Borchers & Symeonides (2000), p.898.

event the local law of the other state will be applied." However, the case law largely ignores the Second Restatement provisions and refers questions of construction either to the contract's "centre of gravity",[555] or the law of the place of making,[556] whereby the two often coincide on the facts of a given case.[557]

With regards to digitised goods and services, Section 109(b)(3) of the UCITA provides that "In the absence of an enforceable agreement on choice of law, the following rules determine which jurisdiction's law governs in all respects for purposes of contract law: the contract is governed by the law of the jurisdiction having ***the most significant relationship*** to the transaction," while Section 109(b)(1)&(2) specifically refers to the location of the licensor in an access contract and the location of the physical delivery in a consumer contract[558]. In my view, the action and nature of a licensor who transfers computer information and electronically deliveries a copy of software containing information, is identical to that of a seller concluding a contact online with electronic delivery of goods. Thus, if the law of the place where the licensor is located governs the applicable law, then

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[555] *Sander v. Doe*, 831 F.Supp.886 (S.D.Ga.1993), cited from Scoles, Hay, Borchers & Symeonides (2000), p.899.

[556] *International Harvester Credit Corp. v. Risks.*, 16 N.C. App. 491, 192 S.E. 2d 707 (1972), cited from Scoles, Hay, Borchers & Symeonides (2000), p.900.

[557] *McLouth Steel Corp. v. Jewell Coal & Coke Co.* 570 F. 2d 594, 601 (6th Cir. 1978), cert. dismissed 439 U.S. 801, 99 S. Ct. 43, 58 L.Ed.2d 94 (1978), cited from Scoles, Hay, Borchers & Symeonides (2000), p.900.

[558] § 109 (a) of the UCITA provides: "(1) An access contract or a contract providing for electronic delivery of a copy is governed by the law of the jurisdiction in which the licensor ***was located*** when the agreement was entered into.(2) A consumer contract that requires delivery of a copy on a tangible medium is governed by the law of the jurisdiction in which the copy is or should have been delivered to the consumer."

it can be presumed that the law of the place where the seller is located should govern the applicable law. In this case, where a party is located should be understood as where he has a place of business.[559]

Under the UCITA, in the absence of an applicable choice-of-law provision, the law of a foreign jurisdiction will apply only if it provides substantially similar protections and rights to a party located in a domestic jurisdiction.[560] Section 109(d) further provides that "a party is located at its place of business if it has one place of business, at its chief executive office if it has more than one place of business, or at its place of incorporation or primary registration if it does not have a physical place of business. Otherwise, a party is located at its primary residence."

As illustrated above, "the most significant relationship to the transaction" is a connecting factor to determine the applicable in the absence of choice both online and offline. The "most significant relationship" test requires consideration of factors including "place of contracting; place of negotiation; place of performance; location of the subject matter of the contract; domicile, residence, nationality, place of incorporation and place of business of one or both parties; needs of the interstate and international systems; relative interests of the forum and other interested states in the determination of the particular issue; protection

[559] "Location of the Parties", provided by Article 6 of the UN Convention.

[560] § 109 (c) of the UCITA.

of justified and other interested states in the determination of the particular issue; protection of justified expectations of the parties; and promotion of certainty, predictability and uniformity of result".[561]

However, the "place of contracting" appears to be the weakest basis for party autonomy, such a contract is easy to manipulate and may result in an "interstate contract", that is a contract that becomes valid by virtue of the interstate factor although it would be defective in any state with a more real connection.[562] With regards to "place of performance", for instance, the seller A sold the software to the buyer A in the US and installed it in London, under these circumstances, where was the contract performed? It is hard to determine. It should be suggested that the instalment agreement alongside with sales of goods contract is deemed to be the secondary agreement, thus, the place of performance is regarded to be the place of performance of the main contract, that is, in the US.

To summarise, in the US the contract will be governed by the law of the country where it has the most significant relationship to the contract, which is identical to the closest connection principle in the EU. Furthermore the law where the licensor is located, which is at his place of business, will govern the contract under Article 109 of the UCITA. According to the findings to the applicable law in B2B electronic contracts, the place

[561] UCITA with prefatory note and comments, available at http://www.law.upenn.edu/bll/ulc/ucita/2002final.htm (last visited on 30 April 2007).

[562] Prebble(1973), 433, p.411, cited from Scoles, Hay, Borchers & Symeonides (2000), p.873.

where has the most significant relationship to the contract or transaction would be the seller's place of business, due to the character of the Internet transaction as we discussed in Section 4.2.3. Thus, the law of the country that has the closest relationship to electronic contracts or transactions should be the law of the seller's place of business, which is compatible with the Rome I Proposal.

4.4 China

In China, the two general principles to determine applicable law in contracts are the same as those in the EU and US: First is party autonomy that parties are free to choose the applicable law governing the contract; Second, the closest connection or the most significant relationship to the contract or transaction is regarded as a linking factor to determine the applicable law in absence of choice. However, China is a civil law country with written laws. There would be no choice of law contracting matters in China unless the contract includes an "international" factor.[563] A contract is deemed to be "international" when (a) at least one party is not a Chinese citizen or legal person, (b) the subject matter of the contract is in a third country (i.e. the goods to be sold or purchased is located outside of China), or (c) the conclusion or performance of the contract is made in a third country.[564]

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[563] Zhang (Winter 2006), 289, p.297.

[564] Zhang (Winter 2006), 289, p.298; See also Article 178 of Organic Law of the People's Courts, promulgated by the National People's Congress in 1979.

Party Autonomy / Freedom of Choice

With regards to applicable law in foreign contracts, the National People's Congress of the People's Republic of China enacted a unified Contract Law,[565] which has been in force since 1 October 1999. Article 126 of the Chinese Contract Law provides that "Parties to a foreign related contract may select the applicable law for resolution of a contractual dispute, except otherwise provided by law"[566]. Furthermore, Chapter VIII of General Principles of Civil Law of P.R. China[567] determines which applicable law should be applied in civil relations with foreigners. Article 145 of the General Principle of Civil Law provides that "the parties to a contract involving foreign interests may choose the law applicable to settlement of their contractual disputes, except as otherwise stipulated by law".

Applicable Law in Absence of Choice

To determine applicable law in absence of choice, Article 126 of the Chinese Contract Law provides that "If the parties to a contract involving foreign interests have not made a choice, the law of the country to which the contract is most closely connected shall be applied"[568]. It then further tackles specific points, such as, that "the contracts for Chinese-foreign

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[565] China National People's Congress, Public Notice 1999 No 14.

[566] Article 126 of the Contract Law of the People's Republic of China 1999 (thereafter "the Chinese Contract Law"), available at http://cclaw.net/ (last visited 27 August 2007).

[567] General Principles of Civil Law of the People's Republic of China, promulgated on 12 April 1986, Article 142-150.

[568] Article 126 of the Chinese Contract Law.

equity joint ventures, Chinese-foreign contractual joint ventures and Chinese-foreign cooperative exploration and development of natural resources to be performed within the territory of the People's Republic of China shall apply the laws of the People's Republic of China"[569]. Article 145 of the General Principle of Civil Law also provides that "the parties to a contract involving foreign interests may choose the law applicable to settlement of their contractual disputes, except as otherwise stipulated by law; If the parties to contract involving foreign interests have not made a choice, the law of the country to which the contract is most closely connected shall be applied".

The Supreme Court of China has accepted the idea of applying characteristic performance in order to achieve a more efficient determination of the applicable law under the "closest connection" rule. It decided to make it one of the standards used to judicially determine the applicable law. The reason for the Supreme Court's adoption of the characteristic performance based criteria is twofold: Firstly, it makes the determination more objective by limiting the discretionary powers of the courts when determining the applicable law. Secondly, this approach will improve the result's certainty, predictability and uniformity.[570]

The Supreme Court explains the characteristic performance that in a contract for the international sale of goods, the law that is most closely connected with the contract is the

[569] Article 126 of the Chinese Contract Law.

[570] Zhang (Winter 2006), 289, p.325.

law of the seller's place of business at the conclusion of the contract. If, however, the contract was negotiated and concluded in the place of the buyer's business, the applicable law shall then be that of the place of the buyer's business.[571] A foreign law cannot be chosen as the applicable law if it violates the social public order of China. At the time of concluding contracts in international sale of goods online, the seller may sit at his place of business, communicating electronically with the buyer who may sit at his place of business. The electronic contract then will be then without the seller and buyer's physical presence. Thus, the Chinese Supreme Court's rationale is not applicable to electronic contracting. In an electronic contract, the applicable law is the law of the seller's place of business before or at the conclusion of the contract. In short, "party autonomy" is the principle of ascertaining the applicable law, whereas "closest connection", the same as the EU and US, is the factor to determine the applicable in absence of choices. The closest connection to the contract concluded online should the seller's place of business, if not, his habitual residence.

4.5 Conclusion and Recommendation

In conclusion, the EU, US and China choice of law systems are all in favour of party autonomy. The parties are free to choose the governing law and state it in the contract (in cases of express choice or its equivalent). Otherwise, the contract will be governed by the

[571] See Supreme People's Court, The Answers to Questions about Application of The Foreign Economic Contract Law of China (1987).

law of the country with which the contract is most closely connected or has the most significant relationship to the transaction in cases of absence of express choice. In my opinion, the place of business and the place of performance are more difficult to be determined in electronic transactions. Generally, traditional choice of law principles should still apply to electronic contracts if the delivery of goods involves physical transfer. However, due to the complex and unique of online contracting when involving electronic delivery, it is necessary to further establish or clarify the methods of determining the applicable law to e-contract disputes. For instance, in the absence of a choice of law clause in electronic contracts, how do we ascertain the "most closely connection" factor over the Internet in order to determine the applicable law?

In the absence of choice of law, the law of the country which is most closely connected with the contract will govern the contract. This will be determined by looking at the most closely connection factors: where is the place of performance and whether the defendant's activities have effects in that state. According to the findings in the EU, US and China, the seller's place of business seems to be the most enduring connecting factor, which has the economic impact on its area, thus, the law of the seller's place of business should be the law governing B2B electronic contracts in the absence of a choice of law clause.

Volume II

5. Chapter Five

Secured Transactions: Electronic Signatures and Authentication

5.1 Introduction

In practice, parties involved in electronic commerce in open networks such as the Internet are faced with the problem of authentication of the communicating parties, i.e. knowing that the sender of an electronic message is actually the person they claim to be. In addition, communicating parties also need to ensure that the electronic message received is the one that was actually sent, i.e. the integrity of the message.[572] A signature is a familiar way for individuals to make apparent on paper that they are who they say they are and that, often, they agree to be bound by whatever they are signing. A signature, therefore, generally provides authentication of the signatory. It is also an indication of 'acceptance' or 'consent' to a legally binding commitment.[573]

In the new era of the information society, the ultimate medium of remote communication between unknown parties is established on the Internet.[574] E-transaction security becomes a significant barrier to the development of e-commerce. Many web sites use a technology called Secure Sockets Layer (SSL) to encrypt the personal information over the Internet. To ensure that an e-transaction is safe, customers usually look for the logos from the companies such as VeriSign or TrustE logo.[575] Thus, as a result of technology shift from

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[572] Julia-Barcelo & Vinje (1998).

[573] Gringras (2003), p.38.

[574] Gladstone (1997), 13, p.36.

[575] "E-Commerce: Safety Guide", by PayPal & eBay, p.6, available at http://pages.ebay.com/merchantsolutions/PayPal_eBay_eCommerceSafetyGuide.pdf (last visited on 8 May 2007).

traditional face-to-face transactions, technical architectures and authentication methodologies often substitute for the trust that trading partners formerly developed solely between each other.[576] Identification and authentication provides senders and receivers with assurances that each party will be identified uniquely so that each will know where transactional information originated from and to whom it was sent.[577]

From a legal perspective, businesses may be reluctant to get involved in an electronic transaction if the present legal framework fails to offer necessary guarantees for a trustworthy and secure online commerce. But these goals can be achieved through the use of electronic signatures. For electronic signatures to accomplish such objectives in open networks, they need to be used in conjunction with certificates issued by certification service providers (CSPs), which certify the veracity of the link between the electronic signature and the identity of the electronic signature holder. Therefore, for electronic commerce to flourish, electronic signatures must be legally recognised as equivalent to their hand-written counterparts. In addition, a legal regime must be set up for the establishment and functioning of certification service providers which can generate trust among trading parties in certification authorities (CAs), and thereby in electronic signatures. Further, the security issues need to be addressed, not only on a national level

[576] Lessig (2001), 329, p.330-331.

[577] Anderson (Summer 2005), 1441, p.1449.

but also and most important internationally in order for e-commerce to blossom.[578]

E-commerce legislation is a recent phenomenon, both on an international and a national level. Electronic commerce, in particular with electronic signatures and electronic authentication, is difficult to regulate. That is because the scope of electronic commerce and the technology with rapid changes. The pace of change is so great that law struggles to adapt to suit the needs of society. One is left with having to make a choice between either applying current legislation or enacting new legislation formulated specifically for electronic commerce. Another major legal challenge is that the new technology encourages transnational transactions. This leads to problems as to international recognition of electronic signatures and authentication. Many countries are increasingly making efforts to cope with these difficulties in electronic signatures and electronic authentication legislation.

This chapter will firstly attempt to look at the definitions, features, benefits and functions of electronic signatures and electronic authentication, analyse the different types of electronic signatures available in the market and, in particular, highlight digital signatures, one of the most important forms of electronic signatures, using cryptography technology. Secondly, this chapter will identify the forms and conditions of establishing Trusted Third Parties, called Certification Authorities (CAs), providing electronic signatures and

[578] Spyrelli (2002).

authentication services. Thirdly, the chapter will focus on one of the legal aspects uniquely connected with electronic signatures, i.e. the duties and liabilities of CAs, especially on the liability regime which applies between CA and a third party who uses the certificate to validate the identity of a certificate holder intending to transact with the third party. Fourthly, this chapter will critically analyse and compare the EC Directive on Electronic Signatures,[579] the US Uniform Electronic Transactions Act (UETA),[580] the US Electronic Signatures in Global and National Commerce Act 2000 (E-Sign Act)[581] and the Law of People's Republic of China on Electronic Signatures,[582] alongside an examination of the international laws, UNCITRAL Model Law on Electronic Commerce, UNCITRAL Model Law on Electronic Signatures and UN Convention on the Use of Electronic Communications on Electronic Contracting (the UN Convention).[583] Finally, this chapter will provide suggestions concerning the international harmonisation of electronic commerce legislation, as well as an agenda of legislative measures taken by the EU, US, China and international organisations and the possibility of the achievement of a common

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[579] Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community ramework for Electronic Signatures, Off.J.EC L13/12 (19/01/2000), at http://europa.eu.int/comm/dg15/en/media/sign/99-915.htm (last visited 3 June 2004).

[580] Uniform Electronic Transactions Act, available at http://www.nccus/org/uniformact_summaries/uniformacts-s-s-ueta.htm (last visited 4 June 2004).

[581] The US Electronic Signatures in Global and National Commerce Act 2000 (E-Sign Act), available at http://www.ftc.gov/os/2001/06/esign7.htm (last visited on 28 September 2007).

[582] Law of the Peoples Republic of China on Electronic Signature, 28/08/2004, the 11th meeting of the Standing Committee of the Tenth National People's Congress of the People's Republic of China, available at http://www.law-bridge.net/english/LAW/20064/0221374918883.shtml (last visited on 28 September 2007).

[583] Available at http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce.html (last visited on 28 September 2007).

global consensus on electronic authentication.

5.2 Electronic Signatures

5.2.1 Definition

It has widely been accepted that it is necessary to provide evidence of a party's intention to be bound by a contract by making a written signature. That is to say, the evidence of transactions usually derives from the paper-based contract, which is finalised by a manuscript signature. In *Goodman v J Eban Ltd*, it outlines a general principle: "the essential requirement of signing is the affixing in some way, whether by writing with a pen or pencil or by otherwise impressing upon the document, one's name or "signature" so as personally to authenticate the document."[584] A signature enclosed electronically should be treated as "most closely analogous to a rubber stamp signature".[585] In the modern information world, using electronic means to sign one's name should be acceptable in the same way as a written signature. However, unlike individual manuscript signatures, electronic signatures lack the uniqueness in written pattern. These identified limitations necessitate electronic documents to prove trustworthiness and authenticity.[586] So how can it be done in electronic documents?

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[584] *Goodman v J Eban Ltd*, [1954] 1 All ER 763, cited from Wild, Weinstein & MacEwan (2005), p.65.

[585] Rubber Stamps affixed to a document can establish valid signatures, *Lazarus Estates, Ltd v. Beasley* [1956] 1 QB 702, cited from Reed (2007), p.210.

[586] Bharvada (2002).

Electronic signatures should be the key point in this authentication process. At the international level, according to Article 2 of the UNCITRAL Model Law on Electronic Signatures 2001, an "electronic signature" means "data in electronic form in, affixed to or logically associated with, a data message and to indicate the signatory's approval of the information contained in the data message".[587] Article 6 sets out features of an electronic signature, which are: "(a) it is uniquely linked to the signatory; (b) it was created under the control of the signatory; (c) its integrity is clear; and (d) the integrity of the message is also clear form signature".

The EC Directive on Electronic Signatures defines an electronic signature as "data in electronic form which are attached to or logically associated with other electronic data and which serve as a method of authentication".[588] In the United States, the Uniform Electronic Transactions Act (UETA) simply allows the signature to be accomplished through electronic means. There are no specific requirements of technology to be used in order to create a valid signature.[589] For instance, one's voice on an answering machine may suffice if the requisite intention is present. Similarly, including one's name as part of an electronic mail communication also may suffice, as may the firm name on a facsimile. Therefore, a symbol, sound or process would not amount to a signature in the absence of

[587] UNCITRAL Model Law on Electronic Signatures (2001) at http://www.uncitral.org (last visited 2 June 2004).

[588] Article 2(1) of the EC Directive on Electronic Signatures.

[589] Prefatory Note and Comments on the Uniform Electronic Transactions Act, 1999, available at http://www.law.upenn.edu/bll/archives/ulc/fnact99/1990s/ueta99.htm (last visited 30 August 2007).

the requisite intent. In electronic communication, one may use a digital signature with the requisite intention, or one may use the private key solely as an access device with no intention to sign or accomplish a legally binding act. In any case the critical element is the intention to execute or adopt the sound or symbol or process for the purpose of signing the related record. Under the US ESign Act (Electronic Signatures in Global and National Commerce Act of 2000), an "electronic signature" is widely defined as "an electronic sound, symbol or process, attached to or logically associated with a contract".[590] In China, the Law of the People's Republic of China on Electronic Signatures (Chinese Signatures Law) defines an "electronic signature" as "data included and attached in data message in electronic form, for the use of identifying the identity of the signatory and showing that the signatory has recognized the contents therein".[591]

As noted above, although there are different definitions in different laws, the effectiveness of an electronic signature should be the same: an e-signature is only producible by the sender and any change will make it incompatible with the integrity of the signature.[592] Parties must be able to use techniques to ensure that the business conducted over the networks will be secure. Briefly speaking, electronic signatures should be regarded as a means of verifying the identity of the user of a computer system to control access or

[590] Sec 106 (5) of US E-sign Act 2000.

[591] Article 2 of the Law of the People's Republic of China on Electronic Signature (Chinese Electronic Signatures Law).

[592] Reed (2007), p.219.

authorise a transaction.

5.2.2 Forms of e-signatures

Electronic signatures can take many forms and can be created by many different technologies, such as use of a password or personal identification number (PIN); smart card; biometrics; digitised signature or digital signature.

Password or personal identification number (PIN)[593] is "a set of numbers or characters shared only by the system and the user, and usually encrypted if the authentication occurs over an open network".

Smart card[594] is "a plastic card similar to a credit card except that it contains a microprocessor (a "chip") that can generate, store, and process data, and it can be programmed to be activated only when the user enters a PIN or other identifier".

Biometrics[595] are "technologies for measuring and analysing human body characteristics such as fingerprints, eye retinas and irises, voice patterns, facial patterns, and hand measurements to authenticate their identity".

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[593] Nunno (2000), p.395.

[594] *Ibid*, p.396.

[595] *Ibid*, p.396.

Digitised signature[596] is "a form of biometrics, which is a graphical image of a handwritten signature, usually entered using a special digital pen and pad input device".

However, a digital signature, as one of the most important forms of electronic signatures, is defined in the ABA's (the American Bar Association) Guidelines as "a transformation of a message using an asymmetric crypto-system and a hash function such that a person having the initial message and the signer's public key can accurately determine whether the transformation was created using the private key that corresponds to the signer's public key, and whether the initial message has been altered since the transformation was made".[597] In short, digital signatures should be regarded as the most advanced and widely used form of electronic signatures, which are founded on the public key cryptographic method.

Among the above methods, the most reliable way of electronic signature is digital signatures through cryptography (i.e. encryption and decryption techniques).[598] So what is cryptography?

Cryptography can be defined as an act of secret writing composed of a series of ciphers and codes used to hide a message's content. In effect, the message will become impossible

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[596] *Ibid*, p.396.

[21] "ABA's Digital Signature Guidelines" at http://www.abanet.org/ftp/pub/scitech/ds-ms.doc (last visited 4 July 2004).

[598] Basu & Jones (2003).

to read when parties who do not have the code to decrypt it.[599] There are two types of cryptographies: The first one, known as symmetric or secret key cryptography, uses the same single key for the encryption and decryption process. The second one is called asymmetric or public key cryptography utilises two different keys for the encryption and decryption process.[600] Asymmetric or public key cryptography is widely used in electronic signatures nowadays, which uses two keys: a private key (held only by the sender of transmitted data) used in conjunction with a signature algorithm to sign the data, and a public key (often made public in an online directory used by the recipient of the data with the algorithm to verify the signature received. For example, assume that A is a sender and B is a receiver. A would like to communicate with B, a stranger with whom A has never communicated before, A and B could exchange the plain text of their public keys. Then, A and B can each encrypt their outgoing messages with the other's public key and decrypt their received messages with their own secret, private key. Then again, there may be a problem: how could A know whether the message is really from B or from an impersonator? B may have the same problem regarding to A. So this needs a trusted party, such as a Certification Authority (CA), to make a confirmation of their public keys as well as the accuracy of the information by issuing certificates to both parties. With the CA's guarantee, digital signatures will come into legal effect.

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[599] Fresen (1997).

[600] Bharvada (2002), 265, p.268.

As stated above, digital signatures are based on what is technically known as dual key cryptography. When an electronic signature is created two "keys" are created with it: a private key and a public key. These keys are mathematical codes that are different from each other, but inextricably linked. The private key remains with the person who owns the electronic signature and is kept secret, whereas the public key is distributed freely. The relevance of these keys to an electronic signature is best explained by way of an example.

Suppose that A wishes to send B an email, preferring to sign electronically. A could compose the email and electronically sign it by attaching his digital certificate as well as his public key. When A sends the email, his private key encrypts his signature. When the email is received, B will use A's public key to decode the encrypted signature. Once the signature has been unencrypted, B will be able to confirm that it was A who sent the email. This confirmation process is known as authentication.[601] If, therefore, A accepted an offer by B, then the use of his electronic signature would be the same as signing a contract manually.

5.2.3 Benefits

There are two major benefits that can be identified with the use of electronic signatures. The first is that when an electronic signature is used and the authentication process has

[601] Wild, Weinstein & MacEwan (2005), p.67.

been completed, the recipient of the email will be informed whether the email has been tampered with during the process from the sender's computer to the recipient's computer. As a document is digitally signed, the private key will perform a mathematical calculation of the entire contents of the document. This will produce a summary, which is also encrypted and sent along with the document. When the document reaches the recipient's computer and the public key is authenticating the signature, the public key will perform a similar calculation of the document's contents and also produce a summary. The mathematical link between the two keys means that the summaries will be identical if the document received is exactly the same as the document that is sent. The first summary (created by the private key) is unencrypted and then compared with the new summary (created by the public key) and if one is different from the other, the recipient is notified that document has been intercepted and altered en route. Although occurrences of "email hijacking" are low given the number of emails that are sent each day, the value of some property transactions could make attempts at email interception and tampering attractive.

The second benefit of electronic signatures is that they allow for the transmission and receipt of secure emails. This is a highly desirable property, especially for lawyers, who will often have to deal with highly sensitive and confidential information. Secure emails become possible once one person has another person's public key. Although in the example given above, the public key accompanies the electronic signature, this does not

need to be the case. The public key can be emailed separately to an individual; copied to a disk and sent through the post; or even downloaded from a dedicated website.[602]

An example of the digital signature process is: if A wishes to send B a secure email, A will use B's public key to encrypt the email and also any documents that are attached. Once encrypted, the only way that the email can be unencrypted, is with a public key's corresponding private key. Therefore, if A's public key has encrypted the email, it can only be unencrypted by A's private key. If anyone does intercept the email whilst in transit they will be unable to view its contents unless they have a copy of A's private key.[603]

5.2.4 Functions

Digital signatures can be deemed to be the process of creating, using and verifying a signature provides important functions for legal purposes.[604] Firstly, the asymmetric cryptography (PKI) ensures a high level of security in e-communications and of confidentially of the context of a message sent over an open network like the Internet. Secondly, digital signatures provide authentication of the identity of the signer by attributing the message to the signer; so it is known who participated in a transaction. The

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[602] Capps (2002).

[603] Further explanations and details are available at "UNCITRAL Model Law on Electronic Signatures with Guide to Enactment 2001", United Nations, New York, 2002, p.39 - 40, http://www.uncitral.org/pdf/english/texts/electcom/ml-elecsig-e.pdf (last visited on 28 September 2007).

[604] Angel (1999).

rationale of this function is based on the fact that digital signatures cannot easily be forged, unless the signer loses control of this private key either accidentally or intentionally. Thirdly, the digital signature protects the integrity of the transmitted data so the recipient can be sure that comparing the two message digests will not have altered the message.[605]

In short, digital signatures accompanied by an electronic certificate can provide three important functions: (1) Authentication, which is to authenticate the identity of the person who signed the data so it is known who participated in the transaction; (2) Integrity, which is to protect the integrity of data so it is possible to know the message read has not been changed, either accidentally or maliciously; and (3) Non-repudiation, which is to allow it to enable it to proof subsequently who was involved in a transaction, thus preventing anyone from denying that he /she sent or received the data. Therefore, documents that are authenticated by a secure electronic signature are entitled to a presumption of integrity, that the signature is that of the person with whom it is associated and that the user affixed the signature with the intent of signing or approving the document.[606]

On the other hand, even though the benefits and functions of digital signatures can guarantee security over open networks and strengthen consumer trust in e-commerce, another challenge needs to be confronted. At a late time in the transaction, how can it be

[605] Spyrelli (2002).

[606] Baker & Yeo (1999).

proved who participated in the particular transaction? What will make the identity of the sender and recipient of the data undeniable? How can one establish who else might have read this message? Does the sender have the authority to do this transaction? What happens if the decryption key is lost? Who is liable if the decryption key if compromised?[607] In short, how secure is the security provided by digital signatures?

Verification plays a central role in the process of establishing identity within a PKI.[608] To verify a digital signature, the verifier must have access to the signer's public key and have assurance that it matches the signer's private key. As it is merely a pair of numbers, a public and private key pair has no inbuilt connection with any person. For the purpose of security, persons who are not previously acquainted, but wish to transact with one another via computer networks such as the Internet, will need a means of identifying or authenticating each other. It is necessary to use one or more trusted third parties to associate an identified signer with a specific public key to build up a bilateral relationship. This third party, a Certification Authority (CA), can vouch for a party by issuing a certificate identifying him / her, or attesting that he / she possesses a necessary qualification or attribute. Thus, it establishes electronic transactional trust.

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[607] Tosto & Baracks, (1996).

[608] Anderson (2005), 1441, p.1463.

5.2.5 Legal Recognition

To be a valid and effective, a signature must fulfil three evidential requirements:

"(a) the identity of the signatory;

(b) his intention to sign;

(c) his intention to adopt the contents of the document as his own."[609]

Significantly, Article 9 of the UN Convention on the Use of Electronic Communications on International Contracts (the UN Convention)[610] deals with electronic functional equivalents for writing, handwritten signatures and originals. Article 9(3) of the UN Convention contains a new rule for the electronic functional equivalent of a handwritten signature. Article 9(3)(a) provides that the conditions for electronic signatures to be equivalent to handwritten ones will be if "a method is used to identify the party and to indicate that party's intention in respect of the information contained in the electronic communication". The expression of "party's intention" used in the UN Convention is different from the analogous provision in the UNCITRAL Model Law on Electronic Commerce, which refers to the phrase "party's approval of the information contained".[611] It is a significant improvement that it emphasizes the identity of the party and his intention

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[609] Reed (2007), 197-231, p.209.

[610] UN Convention on the Use of Electronic Communications on International Contracts (The UN Convention), 2005, available at http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/2005Convention.html (last visited 30 August 2007).

[611] Article 7(1)(a) of the UNCITRAL Model Law on Electronic Commerce.

for the information,[612] whilst the UNCITRAL Model Law on Electronic Signatures and the UNCITRAL Model Law on Electronic Commerce require "the integrity of the information which it relates".[613]

But the UN Convention is silent on what constitutes a valid electronic signature. Can a typed name in the context of an email form a valid signature? What are the recognised standards of e-signature techniques?

For example, in the recent case *Mehta v. JPF*,[614] Mr Mehta was a director of Bedcare (UK) Ltd. Bedcare failed to pay the supplier, J Pereira Fernandes (JPF) and ultimately was wound up on a petition by JPF. The case was about the defendant Mr Mehta who asked a member of his staff to send an email to JPF's solicitors for personal guarantee. The email was not signed by Mr Metha but is described in the header as having come from Nelmehta@aol.com. There two key issues at the hearing of the appeal were:

> "(1) Whether the email constituted a sufficient note or memorandum of the alleged agreement for the purposes of Section 4 of the Statute of Frauds[615]; and
>
> (2) Assuming the email was a sufficient note or memorandum, whether it was

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[612] Article 9(3)(a) of the UN Convention.

[613] UNCITRAL Model Law on Electronic Signatures, Article 6(3)(d); UNCITRAL Model Law on Electronic Commerce, Article 7(1)(a).

[614] [2006] EWHC 813 (Ch); [2006] 1 WLR 1543; [2006] 2 ALL ER 891, 7 April 2006.

[615] Section 4 of the Statute of Frauds.

sufficiently signed by or on behalf of Mr Mehta, it being contended on behalf of JPF that the presence of the email address on the copy of the email received by JPF's solicitors was a sufficient signature for these purposes."[616]

So the focal points here are whether the email was sufficient memorandum or note, and whether the sender's automatically inserted email address can constitute a signature?

Judge Pelling Q.C. held that the email was indeed a note or memorandum, because the email was in writing and it was not disputed by Mr Mehta that the offer was orally accepted by JPF.[617] As the defendant's name or initials did not appear at the end of the email or in the body of the email, the Judge considered the issue here to be whether a note or memorandum has been signed at all, rather than with what intention or with what capacity Mr Mehta or his employee signed the relevant document.[618] Thus, the Judge concluded that the presence of the email address at the top of the email did not constitute a signature, following the ruling of *Evans v Hoare*[619], stating: "whether the name occurs in the body of the memorandum, or at the beginning, or at the end, if it is intended for a signature there is a memorandum of the agreement within the meaning of the statute."[620] The judge regarded the inclusion of an email address in such circumstances as a clear

[616] [2006] 1 WLR 1543, p.1546, para.10.

[617] *Ibid*, p.1548, para.16.

[618] [2006] 1 W.L.R. 1543, p.1550, para.20.

[619] [1892] 1 QB 593, cited from [2006] 1.W.L.R.1543, p.1550.

[620] [1892] 1 QB 593, p.597, cited from [2006] 1.W.L.R.1543, p.1550.

example of the incidental inclusion of a name in the absence of a contrary intention.[621] However, if a party or a party's agent sending an email types his/her or his/her principal's name to the extent required or permitted by existing case law in the body of an email, then it would be a sufficient signature for the purposes of section 4 of the Statute of Frauds.[622]

In practice, it is extremely difficult to detect fraudulent emails as attackers have become increasingly sophisticated. Email recipients cannot rely on the sender's email address to validate the true origin of the email. Unfortunately, while it may look legitimate, the "From" field can be altered easily.[623] Thus, the debated point of whether an email header can constitute a signature should focus on whether the email system is secure to guarantee that the sender is the one that sends the email, rather than whether the email address itself constitutes a signature. This should be clarified in the relevant future legislation.

Another major issue is whether typed names in emails constitute signatures. In my view, the concern should focus on the security of the emailing systems, i.e. whether the email systems use secure portals or layers such as SQL, to verify the identity of the email users, rather than the typed form of names contained in the email. If the emailing system can be proved to be secure, there will be sufficient evidence that the email originates from the

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[621] [2006] 1.W.L.R. 1543, p.1552.

[622] *Ibid.*

[623] "E-commerce: Safety Guide", by PayPal & eBay, available at http://pages.ebay.com/merchantsolutions/PayPal_eBay_eCommerceSafetyGuide.pdf (last visited on 8 May 2007).

account owners or authorised users. As a consequence, the typed name contained in the bottom of an email as a signature or even an automated signature (i.e. Prof Gerrit Betlem, School of Law, University of Southampton), which the user creates in a fixed box using the signature button in the email system, will become irrelevant.

The UN Convention has no direct provisions that can be applied, for instance, to the *Mehta* case, but it has included conditions that constitute a presumed valid signature. As for Article 9(3)(b), which prescribes a reliability requirement for the validity of an electronic signature, the UN Convention Working Group had considered two alternative formulations: one is based on Article 7 of the UNCITRAL Model Law on Electronic Commerce; and the other is based on Article 6(3) of the UNCITRAL Model Law on Electronic Signatures.[624] Article 9(3) of the UN Convention now provides:

> "Where the law requires that a communication or a contract should be signed by a party, or provides consequences for the absence of a signature, that requirement is met in relation to an electronic communication if:
>
> (a) A method is used to identify the party and to indicate that party's intention in respect of the information contained in the electronic communication; and
>
> (b) The method use is either:

[624] Report of the Working Group on Electronic Commerce on the work of its 42nd session (Vienna, 17-21 November 2003) (A/CN.9/546), p.48, 54-57.

(i) As reliable as appropriate for the purpose for which the electronic communication was generated or communicated, in the light of all the circumstances, including any relevant agreement; or

(ii) Proven in fact to have fulfilled the functions described in subparagraph (a) above, by itself or together with further evidence."

In Article 9(3), a legal requirement for a signature is met by an electronic signature if Article 9(3)(a) is satisfied, or, either Article 9(3)(b)(i) or Article 9(3)(b)(ii) is satisfied. Article 9(3)(b)(i) can be deemed as prescribing "reliability in theory", whereas Article 9(3)(b)(ii) can be regarded as prescribing "reliability in fact".[625] In practice, the "exception" in Article 9(b)(ii) is likely to swallow the original "rule" in Article 9(3)(b)(i), thereby avoiding the problems associated with Article 9(3)(b)(i). Thus, it is a significant improvement over both Article 7 of the UNCITRAL Model Law on Electronic Commerce as well as Article 6(3) of the UNCITRAL Model Law on Electronic Signatures.[626] However, although Article 9 (3)(b) of the UN Convention applies a functional equivalent principle to adopt the new emerging techniques, it doesn't define what standards of techniques are "as reliable as appropriate" and what are required for further evidence.

Another problematic issue of security is the interactions between the participants. For

[625] Wei & Suling (2006), 116, p.130.

[626] *Ibid.*

example, let's imagine a scenario involving a user (as principal), an electronic agent (as agent) and other user (as the third party): the user uses the intelligent agent as his own agent for contracting, the third party enters into the contract-aimed interaction with the agent, without knowing who (what) stands behind the latter. Neither of the users knows with whom his agent interacts. The only link between them is the agent. Consequently, in case something went wrong, the third party could not address the user directly, because the electronic agent has not provided the identification of the user. This problem could be solved if the user ratified the actions of the agent, providing this way his identification to the third party. Another solution, in order to increase the trustworthiness on the use of artificial intelligences in the campus, could be the adoption of an agency fiction: if the third party had a reasonable cause to believe the agent acted on behalf of the principal, the principal would be liable.[627]

5.3 Electronic Authentication

5.3.1 What is electronic authentication?

"Authenticate" means, according to the UCITA:

> "(a) to sign; or
>
> (b) with the intent to sign a record, otherwise to execute or adopt an electronic symbol, sound, message, or process referring to, attached to, included in, or

[627] EU Commission Legal-IST Project, "Report on Legal Issues of Software Agents", p.64.

logically associated or linked with, that record."[628]

"Authentication" means satisfying the court:

"(a) that the contents of the record have remained unchanged;

(b) that the information in the record does in fact originate from its purported source, whether human or machine; and

(c) that extraneous information such as the apparent date of the record is accurate."[629]

Electronic authentication can be characterised as the process through which the identity of a computer or network user is verified. Authentication ensures that an individual is, in fact, who he or she claims to be. It is distinct from identification, which determines whether an individual is known to the system, and from authorisation, which grants the user access to specific system resources based on identity.[630] In other words, authentication should be a means in providing trustworthy electronic commerce or electronic service delivery, which is used to protect undetected modifications to an electronic document, provide limited, but reliable, information about a person, and provide other functions of a signature in an electronic environment, in particular the signer indicating approval of the signed documents. However, this authentication should comprise a digital signature relying on

[628] Section 102 (a)(6) of the UCITA.

[629] Reed (2007), p.216.

[630] Recktenwald (2004).

asymmetric cryptography, the infrastructure for authenticating information about people and systems, and the mechanism for binding a signature to a digital document.[631] In essence, the most common type of authentication certificate is an identity certificate, widely called a public key certificate (PKC), which has been adopted internationally.

As the purpose of electronic authentication is to confirm the identity of a generator of an electronic document, the identity of a subscriber must somehow be confirmed in an electronic authentication system. In short, authentication is a process used to ascertain the identity of a person or the integrity of specific information. For a message, authentication involves ascertaining its source and making sure that it has not been modified or replaced in transit.

5.3.2 What are the differences from e-signatures?

When conducting electronic commerce, certain authentication methods need to identify those parties involved in a transaction or an application. So what are the differences between Electronic Signatures and Electronic Authentication?

In the offline environment, authentication and signature do not have the same meaning in

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[631] "Authentication – Digital Signatures Guideline" (1999) 2.1 Office of Information and Communications Technology from Department of Commerce in Australia, at http://www.commerce.nsw.gov.au (last visited 15 August 2004).

different legal systems.[632] Authentication is known as a document as a piece of evidence connecting with a person, place or thing.[633] A signature is "any name or symbol used by a party with the intention of constituting it his signature".[634] From my perspective, electronic signatures focus particularly on verifying the identity of the owners dealing with the problem of documental attribution, while electronic authentication deals with the problem of the reliability of key encryption (i.e. public key and private key) and its key holders.

Certification of an electronic signature could combine the functions of signature and authentication, as this kind of certification requires that "the person whose signature it is has made a statement confirming that the signature, a means of producing, communicating or verifying the signature, or a procedure applied to the signature is a valid means of establishing the authenticity or the integrity of the communication or data or both".[635]

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[632] United Nations Commission on International Trade Law (UNCITRAL), Fortieth Session, Possible future work on electronic commerce, Comprehensive reference document on elements required to establish a favourable legal framework for electronic commerce: sample chapter on international use of electronic authentication and signature methods, Vienna, 25 June – 12 July 2007, A/CN.9/630, p.4.

[633] *Farm Credit Bank of St. Paul v. William G. Huether*, 12 April 1990 (454 N.W. 2d 710, 713) (United States, Supreme Court of North Dakota, North Western Reporter), cited from A/CN.9/630, p.5.

[634] *Alfred E. Weber v. Dante De Cecco*, 14 October 1948 (1 N.J. Super. 353, 358) (United States, New Jersey Superior Court Reports), cited from A/CN.9/630, p.5.

[635] Bainbridge (2008), p.360-361.

5.3.3 Certification Authorities (CAs): Trusted Third Parties

5.3.3.1 What are CAs?

A certification authority (CA) is a trusted third person or entity that ascertains the identity of a person, called a subscriber, and certifies that the public key or a public-private key pair used to create digital signatures belongs to that person.[636] That is, trusted third parties (TTPs), called Certificate Authorities (CAs, also sometimes referred to as "intermediate systems" or "certifiers"), offer a way to confirm that a public key belongs to the claimed owner in an independent way.[637] The CA does this by issuing a certificate, which associates an individual with a particular public encryption key.[638] The certificate contains the public key and name of the signatory, digitally signed by the CA.[639]

Therefore, to associate a key pair with a prospective signer, a certification authority issues a digital certificate, which is an electronic record guaranteeing that the prospective signer identified in the certificate holds the corresponding private key. The prospective signer is referred to as the "subscriber". A certificate's principal function is to bind a key pair with a

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[636] "Selected Bibliography on Description of Digital Signatures", Appendix 6 of "The Role of Certification Authorities in Consumer Transactions", Working Groups and Publications, Internet Law and Policy Forum, available at http://www.ilpf.org/groups/ca/app6.htm (last visited 27 August 2007), thereafter "Description of Digital Signatures".

[637] Osty & Pulcanio (Spring 1999).

[638] "The Role of Certification Authorities in Consumer Transactions" (Working Groups and Publications, Internet Law and Policy Forum) at http://www.ilpf.org/groups/ca/draft.htm (last visited 25 June 2004).

[639] "UNCITRAL Model Law on Electronic Signatures with Guide to Enactment 2001", United Nations, New York, 2002, available at http://www.uncitral.org/pdf/english/texts/electcom/ml-elecsig-e.pdf (last visited on 28 September 2007), p.40.

particular subscriber. A "recipient" of the certificate can use the public key listed in the certificate to verify whether the digital signature was genuinely created by the prospective signer holding the corresponding private key.

5.3.3.2 Requirements

Public key cryptography constitutes an attractive technology but it leaves one major gap: how does one correspondent know whether he has the right key for the other correspondent? Two individuals will be able to communicate in confidence if they have a secure channel over which they can pass a key. This will be achieved, by sealing, for instance, a piece of paper or diskette in an envelope and sending it through the mail. But, they will not have such a secure channel if they wish to rely simply on electronic media. No one can trust an e-mail message saying, "Here is my public key", because the very message containing that key may be sent by an eavesdropper. The problem arises whenever two people who do not previously know each other wish to communicate. It often comes to the forefront during online commerce, where a customer wants to get assurances that he can trust someone who is claiming to offer goods and is asking for payment.[640]

Trusted Third Parties (TTPs), such as CAs may be the solution that allows an initial

[640] Akdeniz, Clarke, Kelman & Oram (1997).

contract to be made. If you and your desired correspondent both know an intermediary, and entrust it with your keys, you may decide to obtain each other's public key and start communication. Furthermore, with reference to the functions of digital signatures, the use of this technology for TTPs is currently the most efficient system of establishing a secure and user-friendly environment of e-transactions and reinforcing both businesses and consumers trust on e-commerce.

Sometime, a trusted third party plays a role as an agent. For example, PayPal, an eBay company, enables any individual or business with an email address to securely, easily and quickly send and receive payments online.[641] Customers who enrol with PayPal only need to provide their account information once. It will then be stored on a secure, highly encrypted server. When purchasing something using PayPal, users simply carry out the transaction through their PayPal accounts rather than a credit card. This method is safer, more secure and more convenient than providing financial information to multiple sites of individual sellers.[642]

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[641] Available at http://www.paypal.com (last visited on 8 May 2007).

[642] "E-Commerce: Safety Guide", by PayPal & eBay, available at http://pages.ebay.com/merchantsolutions/PayPal_eBay_eCommerceSafetyGuide.pdf (last visited on 8 May 2007).

5.4 Establishment of CAs

5.4.1 Functions and Roles

As stated above, a certification authority (CA) is a TTP that "acts as a repository of public keys and authenticates the relationship between a particular public key and its supplier".[643] A CA can either be public or private, which seeks to fill the need for trusted third party services in electronic commerce by issuing electronic certificates, signed electronically, that attest to some fact about the subject of the certificate. However, a certificate should be considered as a digitally signed statement by a CA, which provides independent confirmation of an attribute claimed by a person proffering a digital signature.[644] Generally, the certification process requires subscribers to create their own private/public key pair and, after having established their identity to the CA, to demonstrate that they have a private key corresponding to the public key without disclosing the private key.

Once the CA has checked the affiliation between the identified private individual and a public key, it will be able to issue a certificate. A certificate is a digital record that guarantees the link between a public key and the subscriber. It contains the subscriber's identity with the public key and the issuing CA's identity with its own digital signature for the authenticity and integrity of the certificate. Before being made public, the certificate's content may be reviewed by the subscriber who will thereafter be bound by any document

[643] Smedinghoff (1996).

[644] Hindelang (2002).

signed with his private key if it corresponds to the certificate's public key.[645]

Once the certificate's accuracy has been confirmed, the certificate can be published to make it available to third parties who would like to contact the subscriber. The most frequent online publication for certificates is an electronic database of certificates known as a repository. A repository will also provide additional information on certificates such as their suspension or revocation if the key was lost or compromised. After having been published, the certificate can be attached to any electronic communication to enable any recipient to check the connection between the public key and the sender. Therefore, the CA ensures the security of digital signatures to be used as authenticating tools and thus play a principal role in boosting the growth of secure electronic communications.[646] Since the conduct of the CA will affect the normal operation of electronic markets, the regulation of its forms and conditions of establishment is important.

5.4.2 Forms

There are several forms of CAs available in the electronic market. There are Certification Authorities that are licensed (called "Recognized Certification Authorities (RCA)") and some other Certification Authorities operating under a form of voluntary licensing or accreditation (called a "Voluntary Recognition System of Certification Authorities"). But

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[645] Osty & Pulcanio (Spring 1999), 961, p.966.

[646] Description of Digital Signatures.

there is no uniform standardisation in relation to these forms of CA. Most of the developing countries, such as some Asian countries, impose a mandatory registration system on all CAs, while most of the developed countries, such as the UK and the USA, adopt a voluntary recognition system, that is, CAs are free to apply for recognition on a voluntary basis but only those CAs which have achieved certain objective standards will be 'recognized'.[647]

In the United States, for example, certification authorities may include federal and state governmental entities, private persons or entities licensed to act as certification authorities by a state, and private persons or entities acting as certification authorities for commercial purposes.

For example, the US Postal Service (USPS) may be suited to function as a certification authority. In transactions between companies or individuals, it can be seen as a reputed, credible objective third party. Furthermore, its nationwide network of post offices enables applicants to appear in person to provide the confirmation that a registered public key corresponds to an actual, real person.[648]

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[647] Wu (2000).

[648] "United States Postal Service Certification Practice Statement", the United States Postal Service, Version 1, Handbook AS-600, February 2001, available at http://www.apwu.org/dept/ind-rel/USPS_hbks/AS-Series/AS-600%20USPS%20Certification%20Practice%20Statement%202-01%20(170%20KB).pdf (last visited 30 August 2007).

While the apparent assumption in many jurisdictions has been that the government will act as the licensing or accreditation authority (whether as part of a mandatory or voluntary regime), there is growing recognition that private sector organisations, or other types of standards bodies, may be better suited to this role. For example, private entities may also operate as CAs. For example, VeriSign, Inc.[649], supplies certifications and related digital services to natural and legal persons. Furthermore, the Netherlands has, for instance, set up a voluntary Trusted Third Party Chamber with the aim of bringing together the government and private entities, which would be better equipped to the rapid development of market and its applied technologies.[650]

However, whether to require licensing of Certification Authorities or, if not, whether to provide some other forms of voluntary licensing or accreditation, depends on which would be more suitable to the country's economic foundation, technology facilities, legal environment and governmental policies, since both of them have their own advantages. The main benefit of recognition of a CA is that it will afford significant limitations on its potential legal liabilities. For example, a Recognised Certification Authority (RCA), which has complied with all material requirements, will not be liable in case of loss based on a counterfeit digital signature backed up by certificates issued by the RCA. Therefore, to

[649] Available at www.verisign.com (last visited 30 August 2007).

[650] Baker & Yeo (1999).

avoid unlimited legal personality, CAs should endeavour to become RACs.[651]

5.4.3 Conditions of Establishment

When a CA needs to apply for a license to engage in an electronic authentication service, it must comply with a set of requirements of extremely specific (and generally quite stringent) financial and technical standards, such as subject qualifications, hardware management, software conditions, as well as the capability of compensation and so on. CAs must have a sufficient financial amount of registered share capital and satisfy certain fitness and character requirements. However, the Utah Digital Signature Act firstly sets a good example of conditions for establishing CAs. Under Article 46-3-201, in order to obtain or retain a license as a certification authority, a certification authority must:

> "(a) be either: (i) an attorney admitted to practice before the courts of this state, that attorney's partnership which engages principally in the practice of law if the attorney is a partner, or a professional corporation in which the attorney named in the license is a shareholder; (ii) a financial institution, a corporation authorized to conduct trust business, or an insurance company, if authorized to do business in this state; (iii) any title insurance or abstract company authorized to do business in this state; or (iv) the governor, a department or division of state government, other than the Digital Signature Agency, the attorney general, the Utah Judicial Council, a state court, a city, a county, or the Legislature

[651] Wu (2000), p.9-10.

provided that: (A) each of the governmental entities acts through designated officials authorized by ordinance, rule, or statute to perform certification authority functions; and (B) the state or one of the governmental entities is the subscriber of all certificates issued by the certification authority;

(b) be the subscriber of a certificate published in the repository provided by the division or in a recognized repository;

(c) qualify and hold an appointment as a notary public or employ at least one notary public;

(d) employ as operative personnel only persons who have not been convicted of a felony or a crime involving fraud, false statement, or deception;

(e) employ as operative personnel only persons who have demonstrated knowledge and proficiency in following the requirements of this chapter;

(f) file with the division a suitable guaranty, unless the certification authority is a governmental entity listed in Subsection (1)(a)(iv);

(g) have access to hardware and software suitable for fulfilling the requirements of this chapter according to division rules;

(h) maintain an office in Utah or have established a registered agent for service of process in Utah; and

comply with all licensing requirements established by division rule."[652]

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[652] Article 46-3-201 of the Utah Digital Signature Act.

Accordingly, there are two other instruments clearly laying down the conditions of establishment, one is the UNCITRAL Model Law on Electronic Signatures (Article 10) and the other is the Chinese Electronic Signatures Law (Article 17).

From my perspective, it is important that a certification authority should have sufficient financial resources so as to maintain its operations in conformity with its duties. Moreover, it is also essential that a CA should verify by appropriate means the identity and capacity to act of the person to which a qualified certificate is issued. Finally, it is necessary that a CA should employ personnel, which possesses expert knowledge, experience and qualifications necessary for the offered services.

5.5 Duties and Liabilities of CAs

5.5.1 Duties

The CA performs a role similar to a witness to a document and it is equivalent to those traditional professions such as notaries.[653] To promote the trust in identity and status of the parties involved in electronic transactions, it is essential to define the rights and duties of CAs. According to the ABA's Draft Guidelines, to issue a certificate worthy of trust, the CA must: (1) have a valid and verifiable certificate of its own; (2) conduct the inquiry on which the certificate will be based; (3) accurately state facts in the certificate, including both the facts about the subject and the facts about the CA's investigation; and (4) maintain

[653] Lloyd (2004), p.662.

a certificate revocation list (CRL).[654] The CA's continuing duty to maintain the CRL in a form that can be rapidly and efficiently used by persons wishing to rely on a certificate, is in itself significant evidence that the service element predominates in what the CA is selling.[655]

A CA's main duty is to provide certificates with accurate information about the CA and the subject of the certificate.[656] In order to increase confidence, a certificate should, ideally, mention or refer to such elements as the identity of the CA, the facts upon which the identification of the subject of the certificate is based, the degree of investigation performed by the CA to confirm the facts stated by the subject of the certificate, the start and the dates of the certificate's validity and the location of the relevant CRL.

5.5.2 Liabilities

Liabilities in the world of electronic commerce are complicated and the legislators have recognised the need to balance the interests of the various parties who might be involved, either directly or indirectly, in a particular transaction.[657] Certification authorities are dependent on the ability of their certificates to inspire trust in the reliability of the information contained. Trust may be gained first and foremost from innumerable secure

[654] Section 3.11 of the ABA Draft Guidelines.

[655] Froomkin (1996).

[656] *Ibid.*

[657] "Building Confidence in Electronic Commerce", A Consultation Document, URN 99/642, Department of Trade Industry, available at http://www.cyber-rights.org/crypto/consfn1.pdf (last visited 27 August 2007).

and successful communications in which certificates of a certain CA have proved to be reliable and trustworthy.[658] As provided by the EC Directive on Electronic Signatures, certification-service-providers providing certification-services to the public are subject to national rules regarding liability.[659] In addition, Article 6 of the EC Directive on Electronic Signatures states that: "As a minimum, Member States shall ensure that by issuing a certificate as a qualified certificate to the public or by guaranteeing such is a certificate to the public a certification-service-provider is liable for damage caused to any entity or legal or natural person who reasonably relies on that certificate:

> "(a) as regards the accuracy at the time of issuance of all information contained in the qualified certificate and as regards the fact that the certificate contains all the details prescribed for a qualified certificate;
>
> (b) for assurance that at the time of the issuance of the certificate, the signatory identified in the qualified certificate held the signature-creation data corresponding to the signature-verification data given or identified in the certificate;
>
> (c) for assurance that the signature-creation data and signature-verification data can be used in a complementary manner in cases where the certification-service-provider generates them both;
>
> Unless the certification-service-provider proves that he has not acted

[658] Hindelang (2002), p.10.

[659] Recital 22 of the EC Directive on Electronic Signatures.

negligently."

Suppose that a CA is willfully or grossly negligent, or a CA conspires with the subject of the certificate, then the CA should obviously be liable for its acts and omissions. While on the other hand, beyond the scope of this preliminary exploration, there are some other manners, which are not as straightforward as we mentioned above. These include: "(1) the certificate is accurate, but the transaction goes wrong for some other reason; (2) The security of A's Key is compromised and D uses it, along with A's publicly available certificate, to impersonate A; (3) A revokes her key because she learns of D's actions, but D manages to transact during the period between A's revocation notice to the CA and the CA's posting of a certificate revocation; (4) The security of a CA's key is compromised and D begins issuing bogus certificates or bogus certificate revocations; (5) a CA erroneously lists A's key as revoked, and B refuses to transact with A; and (6) The meltdown scenario: there is a major discovery that the number theory or computation and the algorithms on which A and CA's keys are based are no longer secure".[660] However, the CA should be liable when it fails to take proper evidence of the holder's identity; when it fails to keep proper records preventing forged certificates to be produces; when it fails to keep proper records of revocations; or when it employs dishonest staff to contain unreliable records in certificates.[661] Although there are so many possibilities available, the most common

[660] Froomkin (1996).

[661] Reed (2000).

liability may be caused by misrepresentation.

Liability for Misrepresentation

A simple example of misrepresentation might occur if a CA has failed to notice somebody's "A" misrepresentation, relating to his/her identity or credit rating, when issuing the certificate. If a third party "B" suffered any loss after having entered into a business relationship with A on the reliance of an incorrect certificate, then, the CA might be held negligent for having failed to thoroughly investigate A before issuing the certificate, and liable to B under the law of obligations.[662] The question that needs to be answered is whether the CA may be responsible under contract or tort law.

Under contract law, B, who after having relied on an incorrect certificate, is the victim of a financial loss, will only be able to sue the CA if he can prove a breach of contract.[663] However, in our scenario, contractual relations are only established between the CA and A and between A and B.[664] There is, thus, no contractual relationship between the CA and B. Being outside the contractual sphere, B will have to prove the CA's responsibility on a tortuous basis.

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[662] Unless they have reason to know of the errors, publishers and book distributors are not liable for errors in works they publish and sell. *See, e.g., ALM v. Van Nostrand Reinhold Co.*, 480 N.E.2d 1263 (Ill. App. 1985) (dismissing negligence claim against publisher of allegedly unsafe How To book); *Cardozo v. True*, 342 So. 2d 1053 (Fla. Dist. Ct. App.) (holding UCC did not make book dealer liable to purchaser of cookbook for lack of adequate warnings as to poisonous ingredients used in recipe), *cert. denied*, 353 So. 2d 674 (Fla. 1977).

[663] Guest (1989).

[664] Hindelang (2002), p.16.

The CA may be tortuously liable if he was under a duty of care to provide accurate statements. The scope of that duty of care may depend on the level of inquiry it promised to carry out, before issuing A's certificate. Evidence of that duty of care might be found in the certification practice statement, which a CA would incorporate into a certificate. If the CA, for example, indicated in its practice statement that it would thoroughly check identity before issuing a certificate, it might be guilty of negligence if it failed to notice that it had been presented with an obvious forgery.[665]

According to Recital 40 of the EC Directive on Electronic commerce, service providers have a duty to act, under certain circumstances, with a view to preventing or stopping illegal activities.[666] Article 11 of the UNCITRAL Model Law on Electronic Signatures also provides that: "a relying party shall bear the legal consequences of its failure" to take reasonable steps to verify the reliability of an electronic signature and the validity, suspension or revocation of the certificate, and to observe any limitation with respect to the certificate.[667] However, It might not always be that easy for a third party to prove the CA's negligence, because of the complexities of the technical process involved. Hence, strict liability should be applicable. Although strict liability is usually applied in cases involving

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[665] "Report on CA Responsibilities and Liability for Cross-Border E-Commerce", 31 July 2005, Legal Infrastructure Working Group, Asia PKI Forum, available at http://www.japanpkiforum.jp/shiryou/APKI-F/CA_Responsibility_20050830.pdf (last visited 27 August 2007).

[666] Recital (40) of the EC Directive on Electronic Commerce.

[667] Article 11 of the UNCITRAL Model Law on Electronic Signatures.

goods, it might apply if a certificate, which used a faulty algorithm to produce the CA's digital signature, was found to have a design defect. In my view, the CA and not the relying party should bear the burden of proof in contractual or tortuous liability cases,[668] because in the case of electronic transactions, a CA might be in a better position to insure the risk connected with an unreliable certificate. Hence, it should be acknowledged that a CA should be strictly liable to any third party or the failure to detect A's misstatements and have duties to prove a breach of contract or negligence in the actions. This would, of course, impose a heavy burden on every CA to insure the veracity of every CA.

Limitations of Liability When All Parties Act Reasonably

It goes without saying that it is in the CAs' best interest to try and limit their liability. In order not to endanger the viability of the CAs' industry, it is of paramount importance that a CA should not be liable if it acted reasonably. If a subscriber has suffered financial loss because of a fraudster, he will be inclined to attempt to sue the CA if the fraudster cannot be located or is insolvent. In the absence of legislation, many CAs have defined and limited their levels of responsibility when issuing certificates in their own documentations. In the USA, the documents that define their standards of good practice and liabilities are the Certificate Practice Statement (CPS), which is "a statement of the practices that a CA employs in issuing certificates",[669] and the Relying Party Agreement (RPA), which "notifies the relying party of the warranties, disclaimers, classes of certificates, liability

[668] Article 6 of the EC Directive on Electronic Signatures.

[669] Osty & Pulcanio (Spring 1999).

limits and limitations of damages applying to an issued certificate".[670] One, as yet unexplored, solution to avoid excessive responsibility would be for the insurance market to spread the risk and costs throughout the relevant players of the entire industry.[671]

The unpredictable nature of the CAs' liability, due to the uncertainty and absence of regulation concerning its rights and duties, In an attempt to restrict the liability, Article 6 of the EC Directive on Electronic Signatures states that the certification service provider shall not be liable for damage arising from the use of a qualified certificate which exceeds the limitations placed on the use of that certificate;[672] and shall not be liable for damage resulting from the maximum value of transactions for which the certificate can be used.[673] However, the legislation is lacking for CAs that go out of business. A CA ceasing business might have a disastrous effect on the certificate it issued in the past, and ultimately undermine its validity and, hence its utility, if for example the validity of a digital signature needed to be checked.[674]

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[670] *Ibid.*

[671] "The Role of Certification Authorities in Consumer Transactions" (Working Groups and Publications, Internet Law and Policy Forum) at http://www.ilpf.org/groups/ca/draft.htm (last visited 25 June 2004).

[672] Article 6(3) of the EC Directive on Electronic Signatures.

[673] *Ibid*, Article 6(4).

[674] Froomkin (1996).

5.6 Comparison between the US, EU and China

5.6.1 EU Approaches

The EU goes further than the United States by offering a presumption of validity to specific technologies that create the electronic contract. The EC Directive on Electronic Signatures[675] follows a two-tier approach. Its first tier is to forbid discrimination between handwritten and electronic signatures and the second is to confer additional legal status to "advanced" electronic signatures.[676] Overall, it aims at facilitating electronic commerce and ensuring the functioning of the Internal Market by encouraging the use of electronic signatures and contributing to their legal recognition. It sets the foundations for a secure environment, establishing a legal framework for the liability of CAs towards third parties. The Directive sets out a concept of 'advanced electronic signature', which is based on a qualified certificate and is created by a secure signature creation device. Furthermore, the Directive establishes two different liability regimes, which will apply depending on the kind of certificate. For qualified certificates, liability of the issuing CA towards third parties has been harmonised by imposing minimum standards. All other certificates (i.e. non-qualified certificates) will continue to be governed by national general liability rules as they stand now.[677] At the same time, the Directive recognises third countries' certificates as legally equivalent to certificates issued by Certification Service Providers (CSPs) in EU, as long as there is a link with the EU, or there is a bilateral or multilateral

[675] EC Directive on Electronic Signatures.

[676] *Ibid.*

[677] *Ibid.*

agreement between EU and the third countries.[678]

As discussed above, the European Union has provided high standards for CSPs. These standards, or legally equivalent ones, need to be implemented globally. For instance, if a US firm is engaged in a business transaction with an EU firm, and is required to comply with EU law, the US firm should use an advanced e-signature instead of a basic one. It is further suggested that the advanced E-signature should be based on a qualified certificate created by a CSP, and all of the certification requirements in the US should be legally equivalent to those in the EU.[679]

5.6.2 US Approaches

In the United States, the Uniform Electronic Transactions Act (UETA) is mainly concerned with general contract law that needs to adapt to new electronic or computerised technologies, e.g. concluding contracts via electronic agents or recognising electronic documents.[680] It establishes equivalence between manual and electronic signatures. In contrast to Article 2(1) of the EC Directive on Electronic Signatures, the UETA focuses on verifying the intent of the signatory rather than on developing forms and guidelines.[681] Furthermore, the UETA created a legal framework for reliable and secure e-transactions

[678] Article 7 of the EC Directive on Electronic Signatures.

[679] Blythe (Winter 2005), p.6, para.49.

[680] Boss, (1998), 1931, p.1963.

[681] Spyrelli (2002).

and encourages in practice the private sector's self-regulatory policies, while, at the same time, it limits excessive governmental involvement in e-commerce as it has stayed short from setting up any mandatory scheme regarding e-signatures and certificates. Moreover, the US definition of e-signatures is at the same time broader and more defined than its EU counterpart. The UETA has the same fundamental principle as the UNCITRAL Model Law on Electronic Commerce, that there should be no discrimination against data messages or electronic records, and that there should be parity of treatment between paper and electronic documents.[682]

Furthermore, the US Electronic Signatures in Global and National Commerce Act 2000 (E-Sign Act) has adopted a "minimalist approach" or "technology-neutral approach". It states that a contract's validity cannot be denied simply because it is in electronic form and also electronic signatures cannot be denied legal validity solely because they are not in written form.[683] It does, in effect, not require any minimum level of security for an electronic contract to receive the same basic legal enforceability as a written signature. However, the E-sign Act has come under a lot of criticism from some legal scholars, arguing that it has in its present form serious flaws. Its preemption clause[684], for instance, clearly indicates that it applies merely to business and commercial transactions in or affecting foreign or interstate commerce. Therefore, it creates an uncertain, vague, and

[682] Diedrich, F. (2000).

[683] Section 101(a) of US E-Sign Act 2000.

[684] §101(a), E-Sign Act 2000

unpredictable situation in which no one is entirely sure just what the applicable law is. It is suggested that the US Congress should set in place a national law applicable to all fifty states which would replace all existing state laws currently in effect.[685]

In addition, although the EU and US have greatly advanced in the field of electronic commerce legislation, some limitations still appear in their regulations. For example, most of the laws of evidence in the EU and US attribute full legal power to the hand written signatures on paper documents and most judges around the world are not that enthusiastic to change a well-established practice regarding the in court proof of any transaction. This means that, for the time being, if a PC's system was defective, leading to an e-authorisation forgery or amendments to the context of an e-document, it will be the legitimate users' responsibility to prove that they their PC's software collapsed or were victims of fraudulent spending. As both the EU and US legislation do not limit the users' liability in these cases, it is quite difficult for the user to prove the invalidity of a signature which is supported by a certificate issued by an accredited CA. Besides, for technical failure and abuse of an e-signature, users still carry the burden to provide evidence in disputes over e-transactions in case of human error. Therefore, as far as future harmonisation is concerned, there is a lot of work to be done both on the governmental level and for the private sector. Further, results will definitely be achieved, if the EU and the US continue their transnational dialogue and cooperate with other international bodies for the proliferation of a reliable

[685] Blythe (Winter 2005), p. 6, para.50.

and consistently standardised e-commerce.[686]

5.6.3 Chinese Legislation

In China, the Chinese Electronic Signature law is formulated for "the purpose of regulating the act of electronic signature, establishing the legal effect of electronic signature, and maintaining the lawful rights and interests of the relevant parties concerned".[687] Some scholars argued that, like most countries that have enacted an e-signatures law, China takes a technology-neutral approach in how e-signatures are defined so as not to hinder technological evolution or to favour one technology over another.[688] In contrast, other scholars argued that the Chinese Electronic Signatures Law adopted a two-tier approach.[689] Under the first tier, without prejudice to any rules of evidence, an electronic signature or record shall not be denied admissibility in evidence in any legal proceedings on the sole ground that it is an electronic record.[690] At the second tier, if a rule of law requires the signature of a person or provides for certain consequences if a document is not signed by a person, a digital signature of the person satisfies the requirement, but only if the digital signature is qualified as a "secure" digital signature.[691] In my opinion, Chinese Electronic Signatures Law is vague and answers with no certainty whether it is a technology-neutral

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[686] "European Commission Approves Network for E-Signature Authentication", available at http://www.devicelink.com/emdm/archive/01/01/013e.htm (last visited 2 June 2004).

[687] Article 1 of the Chinese Electronic Signatures Law.

[688] Carnabuci & Li (2005), N69.

[689] Chan (2005), 47-50, p.48.

[690] Article 4 & 9 of the Chinese Electronic Signatures Law.

[691] Article 16 -19 of the Chinese Electronic Signatures Law.

approach or a two-tier approach. However, it is necessary that China's legislation trends to a two-tier approach because the massive Internet population and dispute cases need to adopt stricter and more specific rules to govern the e-commerce system. However, one of the merits of the Chinese Electronic Signatures Law is that it gives the same legal validity and effect to e-signature certificates issued by overseas CSPs (Certification Service Providers) as those issued by domestic CSPs. This would facilitate cross-border online transactions.[692]

From the discussion above, it is obvious that the levels of the regulations of the EU, US and China are different. The fundamental differences in policy orientations and legislative perspectives will hinder, rather than promote, international electronic commerce. Legislators from different countries should participate more actively in dialogue and co-operation that strive for global regulatory harmony.[693]

5.6.4 International Harmonisation

At the international level, a high degree of international harmonisation will be necessary if any scaleable and reliable PKI is to develop. Base on Article 7 of the UNCITRAL Model Law on Electronic Commerce, the UNICITRAL advanced a full Model Law on Electronic Signatures, intending to reflect an approach under which functional equivalents of

[692] Carnabuci & Li, (2005), p.69.

[693] Chan (2005), 47-50, p.49.

traditional paper-based concepts.[694] The Model Law on Electronic Signatures adopts a two-level definition of electronic signatures, and extensively provides for a PKI system of digital signatures through a three party conceptualisation of the duties and responsibilities of parties in the context of electronic signatures, which essentially sets the ground for any national or regional approach to electronic signatures.[695]

In essence, the UNCITRAL Model Law is not designed to bring upon equally binding uniform rules throughout the world, it helps to harmonise legal standards with sensible supranational concepts. At the same time it leaves enough leeway for states to add rules that are specific or desired for their legal system. Additionally, it facilitates further law reform on a global level. This law-making method, from international model Laws to national legislation, "may also pave the way for supranational methods to apply these new legal rules for electronic commerce in a uniform or harmonised manner despite the different legal traditions".[696]

There is no doubt that an international model law, like the UNCITRAL Model Law on Electronic Commerce, is important so as to encourage transnational electronic commercial transactions and build trust through legal certainty. The model law should take into account

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[694] "UNCITRAL Model Law on Electronic Signatures with Guide to Enactment 2001", United Nations, New York, 2002, available at http://www.uncitral.org/pdf/english/texts/electcom/ml-elecsig-e.pdf (last visited on 28 September 2007), p.42.

[695] Murray (2003).

[696] Craig (2004).

the lack of common international technical standards, the constant existence of security and fraud threats as well as the absence of a common legal base regarding cross-border transactions.[697] So as to respond to the growing international electronic cross-border transactions, the harmonising of national laws should be significant to international on-line business. Although international harmonisation will be one of the great challenges for those who advocate facilitating global electronic commerce, conflicting national rules, even if intelligent and internally coherent as national schemes, will present nearly as great a problem for global electronic commerce as would an absence of rules altogether.[698] However, to solve these difficulties, in particular, the issue of legal recognition of international electronic signature and authentication, Working Group IV of the UNCITRAL requested the Secretariat to continue working on these issues.[699]

5.7 Conclusion and Recommendation

To summarise, e-signatures and e-authentication, as a means of providing safety and reliability in e-transactions, do play an important role in e-commerce. With the rapid uptake of electronic commerce, predictably, there has been a rush to enact laws. These laws may suffer from two fundamental problems: The changing nature of the technology has the potential to render any legislation redundant within a short period of time. In addition, national laws are inadequate to govern what is truly a global issue. Regulation

[697] Spyrelli (2002).

[698] Murray (1998), p.11.

[699] A/CN.9/630, p.1.

poses further threats in that it risks stifling electronic commerce if it is unduly burdensome.[700] In particular, trust and security are now, more than ever, critical issues in doing business, whether online or in the paper world. Thus, the increase in global legislation in relation to data protection, information security, electronic signatures, and the control of encryption technology added to the risks of cyber-crime make it now an appropriate time to analyse all the relevant key issues.[701] Carr explains that the global nature of e-commerce and the difficulties of legislating it are a fact. It is therefore "important that divergent approaches to legislation and the resulting uncertainties do not curtail the growth of e-commerce".[702]

One way to achieve legal certainty and predictability is to harmonise the laws. The UNICTRAL Model Law and the EC Directive attempt to reduce legal barriers by using electronic technology to sign contracts. However, the responsibilities of the sender, receiver and certification authorities are not addressed in all laws, while CAs, as trusted third parties, are significant in identifying or authenticating persons who are not previously acquainted but wish to transact with on another over the Internet. The more general lack of regulatory and legal standardisation on the establishing requirements and liabilities of CAs may prove to be a large obstacle to the development of reliable electronic commerce. Therefore, it is necessary to monitor international uniform regulations, implement a global

[700] Swindells & Henderson (1998).

[701] Bharvada (2002).

[702] Carr (2003).

standardisation of electronic commerce rules and harmonise the international electronic transactions market. However, these international regulations or treaties should unify the scope of definitions of electronic signature and authentication, and the forms of Trusted Third Parties or Certification Authorities as well as their establishing conditions, duties and liabilities and remedies.

6. Chapter Six

Dispute Resolutions

6.1 Introduction

Given the nature of the Internet, discussed in previous chapters, in particular the distance between buyer and seller, as well as the prohibitive cost of legal action across jurisdictional boundaries, how does an e-commerce site resolve disputes? What will be the least costly but more efficient solution?

As transactions in a global market mean an increased probability of transnational disputes, parties situated sometimes in different continents are opposed over small claims. Courts or traditional out-of-court dispute resolution mechanisms cannot reasonably resolve such conflicts. As a consequence, a new tool for dispute resolution has appeared which is more efficient, more cost effective and more flexible than traditional approaches: this is online dispute resolution (ODR).[703] ODR is a dispute resolution that takes advantage of the Internet, a resource that extends what we can do, where we can do it, and when we can do it.[704]

ODR was technologically developed in the United States and Canada, and it is still used mainly in the United States.[705] In the mid-1990s, ODR started with four venues: the Virtual Magistrate at Villanova University, the Online Ombuds Office at the University of Massachusetts, the Online Mediation Project at the University of Maryland, and the

[703] Bonnet, Boudaoud, Gagnebin, Harms and Schultz (2004), see generally.

[704] Katsh & Rifkin (2001), p.10.

[705] Alvaro (2003), 187, p.188.

CyberTribunal Project at the University of Montreal, Canada.[706] Whereas early ODR endeavours were non-profit venues sponsored by universities and foundations, today's ODR venues are mainly profit commercial ventures providing services for both B2B and B2C online transactions.[707] A study conducted in 2004 revealed the existence of 115 ODR sites, 82 of which were still operational, while 28 new sites or services launched between 2003 and 2004.[708] ODR utilises the Internet as a more efficient medium for parties to resolve both contractual, such as B2B and B2C, and non-contractual disputes, such as copyright, data protection, right of free expression, competition law and domain name disputes.

For E-commerce entrepreneurs, ODR is attractive as it is something that can be incorporated into their new ventures as part of an overall strategy to build trust among users.[709] Reliable dispute resolution systems will bolster their confidence in e-commerce and stimulate transaction volume. Developing trust and confidence worldwide is highly culture-related; offering a universal dispute resolution mechanism that would take charge of the problem whenever and wherever it emerges is challenging, for the reason that when personal and cultural variations happen, different patterns of disputers' complaining

[706] Ponte (Spring 2001), 55, p.60-61.

[707] Zavaletta (Spring 2002), 2, p.5.

[708] Tyler (2005), p.2.

[709] Katsh & Rifkin (2001), p.5.

behaviours will occur.[710] There is a growing need to establish a set of rules that suits both same- and cross-cultural disputers.

In order to facilitate a change in paradigm from resolving e-contract disputes using mouse-to-mouse ODR, rather than traditional face-to-face dispute resolutions, online alternative dispute resolution rules or regulations are needed. I believe that, ODR, like all of e-commerce, needs to have mechanisms to build trust in dealings of the goods or services. In thinking of how to build up a certain level of e-confidence, we should ask ourselves the following questions:

1. What constitutes lack of trust?
2. What information must ODR providers keep confidential? From that perspective, what security measures are taken to protect the confidentiality and will the principle of confidentiality conflict with transparency?
3. If disputers are unsatisfied with the ODR providers, where they can complain? Or if ODR providers breach service agreements, which court will have jurisdiction? And what will be the online jury proceedings?
4. How can the enforcement problem of online arbitration awards be resolved?

So what induces a lack of trust in ODR? In face-to-face dispute resolution, trust is

[710] Femenia (2000).

established during the resolution sessions. In the offline world, when we walk into a shop, a bank, or may other place that expects us to enter into a relationship requiring some degree of trust, we should be impressed by how hard these places try to inspire trust in us. Expensive buildings and furniture, for instance, are clear signs of credibility.

In the online environment, these signs are obviously not present. Before disputing parties choose ODR mechanism, they will worry about lack of familiarity of the ODR system, theft of identity and credit card information, lack of transparent and effective technology solutions, and lack of controls when ODR providers do not keep their service promise.

The objectives of this chapter are to introduce different forms of online dispute resolution (ODR), against the background of alternative dispute resolution (ADR) developments in the off-line environment, to examine current technology and legal status of ODR in EU, US and China, and to discuss the relations between the various parties in dispute resolutions, especially the Fifth party for the provider of the technology. It further analyses the successful experiences of the existing ODR mechanisms developed by eBay and its authorised ODR provider "SquareTrade", as well as WIPO and ICANN-UDRP. This will enable us to examine what might cause a lack of trust on ODR and to determine how to build up e-confidence, alongside with recommendations of core principles and model codes of conduct on ODR. Finally, a proposal will be produced for resolving e-contract disputes via ODR. However, this chapter will only focus on contractual disputes, including

disputes between the enterprise and the Internet Service Provider (ISP) or web-hosting services provider, including disagreements over interruptions in service and breach in data security, as well as business-to-business (B2B) disputes between the enterprise and its suppliers such as non-performance of contractual obligations, misrepresentations, and complaints from customers regarding services provided by suppliers.[711]

6.2 Online Dispute Resolution (ODR)

6.2.1 Descriptions of ODR: eADR & cybercourts

ADR is a private dispute resolution. The basic forms of ADR are arbitration, mediation and negotiation. Arbitration is an adversarial procedure in which an independent third party decides the case, while mediation and negotiation are consensual procedures in which the disputants aim to reach agreement, either on their own or assisted by a third party called the mediator. With the development of technology, ODR designated cyberspace as a location for dispute resolution, moving ADR from a physical to a virtual place. That is, ODR services are the online transposition of the methods developed in the ADR movement. However, ODR not only employs the ADR processes in the online environment but also enhances these processes in offline environments.[712]

The American Bar Association Task Force on E-Commerce and ADR provides a generic

[711] Chong & Kardon (2001), Section 5, p.4.

[712] Katsh & Rifkin (2001), p.2.

definition of ODR: "ODR is a broad term that encompasses many forms of ADR and court proceedings that incorporate the use of the Internet, websites, email communications, streaming media and other information technology as part of the dispute resolution process. Parties may never meet face to face when participating in ODR. Rather, they might communicate solely online".[713] Edwards divides ODR into "hard" ODR, referring to "procedures intending directly to resolve conflicts" such as traditional ADR, and "soft" ODR, relating to "procedures seeking to prevent disputes" such as eBay's feedback system for reputation ranking.[714] In my opinion, ODR should be defined as online procedures to resolve disputes or conflicts covering eADR and cybercourts. Ebay feedback system, on the other hand, should merely be regarded as a trust or reputation-ranking scheme which can be used as a supplement for ODR to build trust in e-transactions.

When talking about ODR, the less familiar method of dispute resolution is "Cybercourts", also known as virtual courts, e-courts or cyber tribunals. They now exist for instance in Michigan, Ohio, Puerto Rico, Australia and the United Kingdom. Cybercourts permit the presentation of evidence online and, with the help of video conferencing, allow the court to hold informational hearings and receive witness testimony online if the need arises.[715]

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[713] American Bar Association Task Force on E-Commerce and ADR, "Addressing Disputes in Electronic Commerce, Final Report and Recommendation", www.law.washington.edu/ABA-eADR, 2002, p.1.

[714] Edwards & Wilson (2007).

[715] Exon (Winter 2002), 1, p.7.

It is necessary to indicate that ODR is not meant to replace or be a substitute for face-to-face settings when they can be part of the process.[716] In the arena of online dispute resolutions, who can take control? Thomas Schulz argues that governments must exert control because they are the most trusted entity in the field of dispute resolution.[717] Colin Rule agrees that, "to a large extent, government is the ideal host for dispute resolution, because government has a strong incentive to resolve disputes to keep society functioning smoothly, Government is also a good host for dispute resolution because it usually has no vested interest in the outcome of most of the matters it is in charge of deciding".[718]

In my opinion, although government has its advantages to control ODR, it also has its disadvantages, because if government is in charge of ODR, it may raise another issue as to which government will take control, the EU, US or China? Whose ruling will be more favourable when international disputants are involved? Whose government will gain trust from global users?

International Organizations such as United Nations Commission on International Trade Law (UNCITRAL), Organization for Economic Co-operation and Development (OECD), International Chamber of Commerce (ICC), World Intellectual Property Organization

[716] Katsh & Rifkin (2001), p.9.

[717] Schultz (Fall 2004), 71, p.89.

[718] Rule (2002), p.174.

(WIPO) and World Trade Organization (WTO), as well as some other globally well-known organizations such as American Bar Associations (ABA) should exert control of ODR to overcome the above problems. The reasons are: first, international organizations have continuous worldwide reputation and images; second, international organizations are identical to governments, which can make use of their "symbolic capital"[719]. OECD, ICC, WIPO or WTO can operate ODR or accredit ODR providers as brands though symbolic capital, which instils trust in dispute resolution; third, similar to governments, the intervention of international organizations does not aim to be economically profitable and they have funding from grants, private sectors or governments; lastly but importantly, international organizations can regulate ODR uniformly, which will be an advantage in cross-border dispute settlements. At the same time, these self-regulations can a base stone for establishing an international model law in ODR in the future.

6.2.2 Characteristics of ODR

6.2.2.1 ADR v. Litigation

Litigation tends to end with one party being the winner and the other the loser.[720] If revenge or destroying the other party is a goal, courts and trials will continue to be

[719] Symbolic capital is the recognition, institutionalized or not, that different agents receive from a group. A person, a body of persons, or an institution has symbolic capital if it is recognized by society as having characteristics that are valuable in a given field. See Schultz (Fall 2004), 71, p.90.

[720] *Whelan v. Jaslow*, 609 F. Supp. 1307 (E.D. Pa, 1985); 797 F. 2d 1222 (3d Cir 1986); cert, denied 479 U.S. 1031 (1987).

attractive.[721] ADR, however, is viewed as an opportunity for better or more appropriate resolutions than can be provided in court.[722] The ideal of ADR is a win-win solution, and an outcome that the parties are satisfied with and which might even allow them to work together further in the future.[723]

Compared to litigation, ADR has the following advantages:

First, greater speed. Court proceedings may take a long time. It may take months, sometimes years, before a case can be brought before a court. A hearing is generally more quickly arranged in arbitration proceedings. If the arbitrators make it clear to the parties that they understand the essence of the dispute, the parties don't need to repeat their arguments but can direct their attention specifically to the points which are still unclear to the arbitrators, thus saving time and money.

Second, lower costs. ADR generally costs less than litigation. In ADR, the issue of costs may be dealt with in the settlement agreement and is therefore totally within the control of the parties. When cases are resolved earlier through ADR, the parties may save some of the money they would have spent on attorney fees, court costs, and expert fees. However, ADR is not always cheap, and can be as expensive as court action.

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[721] Katsh & Rifkin (2001), p.25.

[722] *Ibid*, p.29.

[723] Katsh & Rifkin (2001), p.29.

Third, informal settlement with more flexibility in outcomes. The ADR proceedings are less formal than court proceedings. The procedural rules are often established in agreement between the parties. Arbitrators and lawyers do not wear gowns. Parties' counsel does not plead from the bench like barristers in court; on the contrary, arbitrators, lawyers and parties often sit around one big conference table.

Fourth, settlement by experts. The courts usually have sufficient general expertise to settle commercial disputes. However, some disputes require extensive technical knowledge. It is impossible for a judge who has to adjudicate all kinds of disputes to be an all-round technical expert. The judge may of course consider the appointment of an expert, though the intervention of the expert takes time and adds to the costs. It can therefore be better to give the expert the task of adjudicating the dispute directly, i.e. appoint an arbitrator sufficiently familiar with the technical and commercial background of the dispute so that no further expert will be needed.

Fifth, private and confidential. Court proceedings are public. In principle, arbitration is not public. The proceedings of ADR are entirely confidential.

Sixth, international settlement with fewer jurisdictional problems. ADR is often the better way to settle an international commercial dispute. From a practical perspective, going to court is a complicated method of conflict resolution in the global environment of the

Internet. If a dispute arises between you and an international business partner or customer, they may file civil lawsuits again you in a foreign court located in their home state or country.[724] Also, each of the parties may refuse to submit to the jurisdiction of a court in the country of the other party, for fear of being at a disadvantage. In addition, e-businesses may find themselves dealing with different courts that are applying different laws to the same dispute, resulting in enormous costs and lost time and productivity.[725]

Seventh, less adversarial, more effective process and better results. Mediation generally enjoys an 80%-85% success rate.[726] Moreover, the resolution is created by the parties, so it should be deemed to work better in between them.

Finally, enforceability. An arbitration award is generally easier to enforce abroad than a court decision, because existing international treaties favour arbitration over national courts.[727] However, concerning judicial confirmation, arbitration only works efficiently when the arbitrators actually solve a dispute. Arbitration awards are generally executed voluntarily. In addition, the basis for arbitration is an agreement between parties; the award does not bind third parties. Requests for third party intervention or for consolidation of related arbitration proceedings can only be entertained if all parties agreed to multi-party

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[724] Ponte & Cavenagh (2005), p.12.

[725] *Ibid.*

[726] Available at http://www.squaretrade.com/cnt/jsp/prs/sd_tribune_111101.jsp (last visited 31 August 2007).

[727] Ponte & Cavenagh (2005), p.14.

arbitration.

6.2.2.2 ODR/eADR v. Traditional ADR

Whereas ADR moved dispute resolution "out of court", ODR moves it even further away from court, which is located in cyberspace.[728] Compared with traditional ADR, ODR/eADR has its advantages.

First, time and financial resources savings. ODR allows parties, who are located in multiple countries or different time zones, or who cannot agree upon a joint meeting time, to converge at a single meeting point without travel and related expenses.

Second, flexibility. ODR allows the parties to choose neutrals anywhere in the world. It no longer matters where expert neutrals reside, as ODR brings neutrals instantly in touch with the parties.

Third, speed. ODR is faster in producing a resolution than traditional ADR, precisely because physical convergence is not necessary for meaningful interaction.[729]

Fourth, transparency and traceability. Since ODR is significantly less expensive than other

[728] Katsh & Rifkin (2001), p.26.

[729] Alvaro (2003), 187, p.189.

forms of dispute resolution, it opens the door to a wider range of disputes than do other dispute resolution institutions. But ODR is not merely a less expensive and more technologically advanced version of ADR; it differs from traditional ADR in substantial respects. Perhaps most importantly, it tends to be more transparent than some ADR processes. ODR, unlike ADR, is conducted through electronic communications and therefore leave a "digital trail". Since the information is transmitted online, it is preserved in digital form, and even after being "deleted" can often be resurrected. The existence of ODR records heightens the element of traceability. In that sense, the records left by ODR are more permanent than those left by court trials, and are certainly better preserved than the oral face-to-face communications exchanged in traditional ADR. Furthermore, digital records may also serve as a check on the behaviour of mediators, parties and their representatives, even if no formal appeal procedure exists.[730]

Fifth, emotional control. ODR lack of in-person interaction can actually be an advantage for disputes in which the emotional involvement of the parties is so high that it is preferable that they do not see each other.[731]

Lastly and most importantly, ODR has two more parties involved then traditional ADR,

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[730] Rabinovich-Einy (2003 -2004), p.1.

[731] Lodder & Zeleznikow (2005), 287, p.302.

called the fourth party and the fifth party.[732]

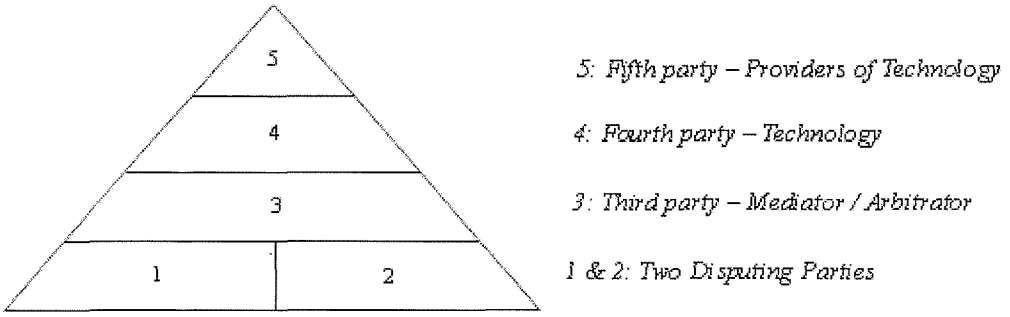

Figure 1: ODR Parties

As shown on the pyramid above, two disputing parties are on the base. The third party is usually the facilitator, mediator or arbitrator. The fourth party is the technology, while the fifth party, the top of the pyramid, is the provider of the technology. The fifth party, being the one who delivers the fourth party, is present in all ODRs. Sometimes, when the third party uses general software, he may become the provider of the technology. A mediator may also run general chat software on his website that he uses to mediate between the parties. He then becomes a fifth party as well.

An important part of future analysis should concern the legal consequences of being a fifth party, and the legal duties this brings with it, such as information requirements the fifth party has to fulfil, liability of the fifth party in relation to the third party and/or the parties

[732] Lodder (2006), p.143.

having a dispute, and possible contractual relationships between the fifth party and the other parties.[733]

6.2.2.3 Cybercourts v. Traditional Courts

Figure 2: Comparison of Jury Proceedings[734]

	Online	Offline
Due Process Protections	No	Yes
Judicial Supervision	No	Yes
Formal Discovery	Independently, and only if lawsuit is field	Yes
Motions	No	Yes
Voir dire	Limited	Yes
Witness Testimony	Summarised	Live
Binding Outcomes	Limited	Yes
Nature of Enforcement	By contract / agreement	By judgment
Number of Jurors	By agreement or by site rule	By court rule
Non-economic Remedies	Yes	No
Right to Appeal	No	Yes

[733] Lodder (2006), 143, p.153.

[734] Ponte & Cavenagh (2005), p.103, (Chart 6.2 Comparison of Jury Proceedings).

Online court proceedings have a significant advantage over offline proceedings: convenience.[735] The same as eADR, the most obvious benefit of cybercourt would be its technological capabilities. For example, the use of technology would bring efficiency to the court system. The management of court pleadings and other documents would be streamlined. In addition, the use of technology would assist jurors, attorneys, their respective clients, and witnesses. It would enable jurors to experience physical evidence in much the same manner as the disputing parties did at the time of the dispute, and attorneys to review information in a cybercase file at any convenient time. Likewise, witnesses could testify without actually going to a physical courtroom.[736]

The most compelling strength of online jury processes is their usefulness in preparing parties to settle disputes in a fashion that is objectively defensible, that is consistent with what outsiders think the case is worth.[737] A second strength is that the cybercourt can be used in pre-trail preparation with no cost in preparing a case for a traditional trial.[738] A third strength is, as opposed to negotiation and mediation, which may result in a settlement or nothing, cybercourt litigation can produce a judgment. Judicially mediated settlements are much easier to enforce because they qualify as "consent judgments" or as another form of enforceable instrument. In addition, there is an element of publicity and accountability

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[735] Kaufmann-Kohler & Schultz (2004), p.40.

[736] Exon (Winter 2002), 1, p.18-19.

[737] Ponte & Cavenagh (2005), p.112.

[738] *Ibid.*

in courts that is lacking in private justice.[739]

These advantages tend to increase trust in the process. In an environment such as electronic commerce which precisely lacks trust, cybercourts may thus play a useful role, supplemental to that of private ODR. They should thus be promoted not only for reasons of convenience, but because they foster confidence in electronic commerce.[740] However, there are still downsides in an online jury proceeding, for example, lack of adequate access to high-technology Internet tools; unbalanced users' technical skills; fraud and deception of evidence; the quality of online jurors.[741] These are obstacles that legislators and practitioners must work on in the future. An example of online jury proceedings (www.iCourthouse.com) will be given in Section 6.4.

6.2.2.4 eNegotiation v. eMediation v. eArbitration

Online negotiation, online mediation and online arbitration can also be called "eNegotiation, eMediation and eArbitration" or "cyber negotiation, cyber mediation and cyber arbitration". The differences among these concepts can be shown in figure 3:

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[739] Kaufmann-Kohler & Schultz (2004), p.42.

[740] Kaufmann-Kohler & Schultz (2004), p.42.

[741] Ponte & Cavenagh (2005), p.113-114.

Figure 3: eNegotiation v. eMediation v. eArbitration

eNegotiation	Automated Negotiation – the parties successively submit to a computer a monetary figure as settlement proposal, the computer then compares the offer and the demand and reaches a settlement for their arithmetic mean.
	Assisted Negotiation – the parties communicate with one another over the Internet, using for instance emails, web-based communication tools or videoconferences.
eMediation	The online form of traditional mediation. A third neutral person with no decision power tries convincing the parties to reach an agreement (the only difference with offline mediation is that the third neutral and the parties always communicate via the Internet).
eArbitration	Similar to traditional arbitration, in the sense that a third party chosen by the parties, or nominated by the institution chosen by the parties, renders a decision on the case after having heard the relevant arguments and seen the appropriate evidence.

As seen in Figure 3, arbitration is an adversarial procedure in which an independent third party decides the case, while mediation and negotiation are consensual procedures in which the disputants aim to reach agreement, either on their own or assisted by a third party called the mediator. However, they have something in common that they all make use of online technology, exchanging and processing information as well as submitting documents via the Internet. In short, it is a virtual procedure established in virtual cyberspace.

Although these three types of online dispute resolutions have their similarities, disputes

should be resolved according to the most appropriate resolutions. Mediation, for instance, addresses well in (1) cases involving parties who desire a settlement but are reluctant or unable to meet with one another directly, such as geographically distant locations; (2) cases that involve highly confidential or proprietary information, such as disputes with trade secrets; and (3) cases in which the dollar value is too low to litigate or arbitrate.[742]

6.2.3 ODR Technology – Three Step Model

The ODR process, as a dispute resolution medium, is desired to be secure, efficient, flexible and user-friendly. It must be able to deal with the initial filing, neutral appointment, evidentiary processes, oral hearings, neutral executive sessions, and the rendering and transmittal of an award in binding processes.[743] It should be envisioned as a virtual space in which disputants have a variety of dispute resolution tools at their disposal. Participants can select any tool they consider appropriate for the resolution of their conflict and use the tools in any order or manner they desire, or they can be guided through the process.[744] The most effective ODR environment can be created by the three-step model as follows:

> "First, the negotiation support tool should provide feedback on the likely outcomes of the dispute if the negotiation were to fail – i.e. the "best alternative to a negotiated agreement" (BATNA);

[742] Ponte & Cavenagh (2005), p.71-72.

[743] Alvaro (2003), 187, p.188.

[744] Lodder & Zeleznikow (Spring 2005), 287, p.300.

Second, the tool should attempt to resolve any existing conflicts using dialogue techniques;

Third, for those issues not resolved in step two, the tool should employ compensation/trade-off strategies in order to facilitate resolution of the dispute.

Finally, if the result from step three is not acceptable to the parties, the tool should allow the parties to return to step two and repeat the process recursively until either the dispute is resolved or a statement occurs."[745]

At the early stage, to fulfil the ODR functions, Lodder developed an ODR software called "DiaLaw", a two-player dialogue game designed to establish justified statements, which can clearly explain the basic logic of the ODR environment. A dialogue in DiaLaw starts when a player introduces a statement he/she wants to justify. The dialogue ends if the opponent accepts the statement (justified), or if the statement is withdrawn (not justified). A party using the argument tool can enter one of the following three types of statements:

"1) Issue: A statement that initiates a discussion. At the moment of introduction, this statement is not connected to any other statement.

[745] *Ibid*, p.301.

2) Supporting statement: Each statement entered by a party that supports statements of the same party.

3) Responding Statement: Each statement entered by a party that responds to statements of the other party."[746]

In response to the discussion above, here is an example of a DiaLaw formula and a simple scenario involving electronic contracting:

Formula

The initial statement P(E, P(E)) commences the issue of dispute, which is always an issue since it is the only statement not connected to other statements at the moment of opening the dialogue game board. P(E, Q(c)), detailing the actions of party P, who enters the statement E, in response to the connected claim C made previously by party Q.

Scenario

P: Peter White Trading Company

Q: Queen Computing Manufactory

P sued Q for breach of the electronic software sales contract:

[746] *Ibid*, p.305.

Statement

P("Our company wants to return your products.")

Dialogue

Q("We can't accept your returning products." P("Our company wants to return your products."))

P("Your products lack of 'diary' function which is in breach of our contract.", Q("we can't accept your returning products."))

Q("We can add the function for your products, or refund 2% of the payment amount.", P("Your products lack of 'diary' function which is in breach of our contract."))

P("Return 2% of the payment by the end of March.", Q("We can add the function for your products, or refund 2% of the payment amount."))

Q("Return 2% of the payment by the end of March.", P("Return 2% of the payment by the end of March."))

Q=P & P=Q → Dispute Settled

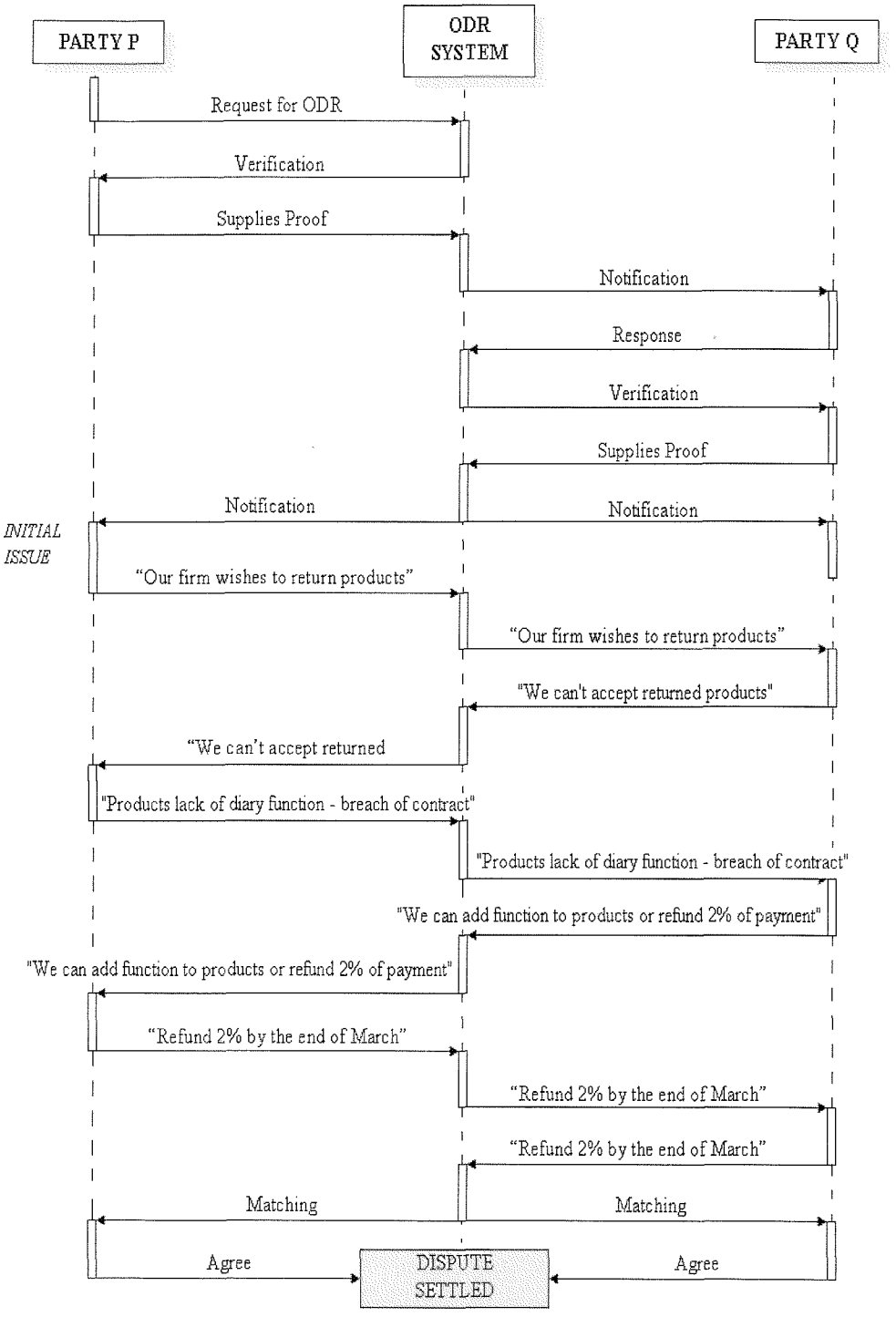

Figure 4: ODR Settlement

6.2.4 Hybrid Process: Med-Arb Two Step Approach

Some ODR processes are a combination of separate ODR processes.[747] Mediation and Arbitration (Med-Arb) is a mechanism of a hybrid process, in which disputed parties agree to use a blend of mediation and arbitration to handle their conflict. First, a mediator is in charge of the dispute mediating any disagreement between he parties. If the disputants refuse to accept the solutions, then the mediator acts as an arbitrator and decides the results of the remaining issues.[748]

The final result, therefore, combines both mediation settlement and adjudicatory processes. This two step approach helps avoid throwing the conflict into the more cumbersome and time-consuming litigation process. [749] A successful example can be given by NovaForum,[750] which provides med-arb services through its Electronic Courthouse. Another successful example can be also provided by AAA-Cybersettle,[751] which combines online negotiation with the other online dispute resolutions. The mechanism of AAA-Cybersettle will be detailed in Section 6.4.2.

6.2.5 Online Jury Proceedings: Three Step Process

Online jury is similar to offline jury. It allows peers to judge cases in ways identical to a

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[747] Ponte & Cavenagh (2005), p.24.

[748] *Ibid.*

[749] *Ibid.*

[750] Available at http://www.novaforum.com (last visited on 28 September 2007).

[751] Available at http://www.adr.org (last visited on 28 September 2007).

live courtroom trial, incorporating most of the steps in the pre-trial and trial stages of litigation.[752] However, differing from an offline courtroom is that the jury doesn't actually see the parties, nor do they interact with one another to any significant extent.[753] A sample online jury proceeding is as below (iCourthouse.com):

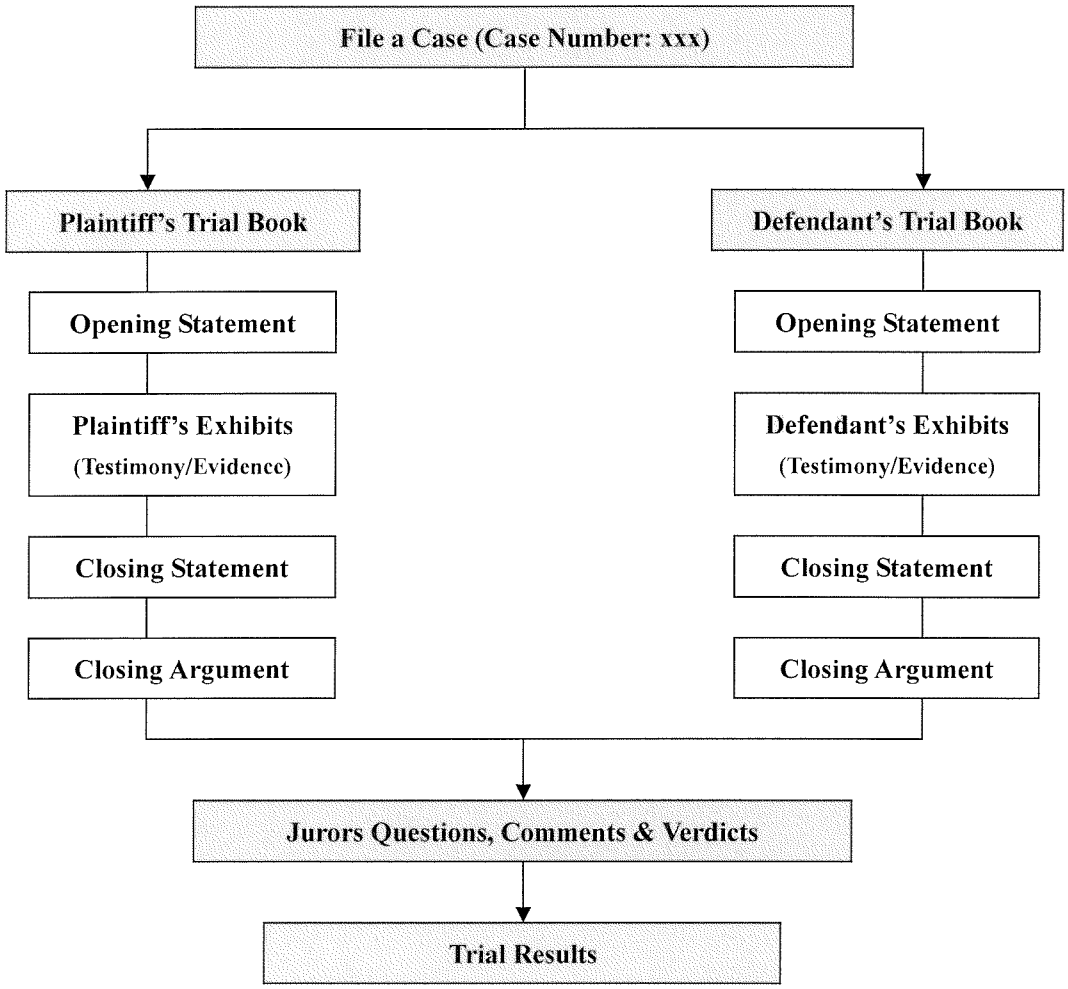

Figure 5: Online Jury Proceeding (www.iCourthouse.com)

[752] Ponte & Cavenagh (2005), p.102.

[753] *Ibid.*

Case filing including statement, testimony, evidence and arguments can be submitted via interactive forms[754] located in the "Trial Book".[755] Evidence can be any of the scanned documents, pictures, webpages, email sent and received. Finding a regular case at iCourthouse is free and so is being a juror. Lawyers can file a JurySmart case for under $200 and receive thereafter a certified report with the trial outcomes.[756] Cases are open until closed by the plaintiff, when the parties agree there has been a final verdict or the parties have settled the case.[757] Alternatively, parties can leave a case for juror feedback indefinitely but may agree that only the verdicts given before a specific date and time will count or that only a specific number of the verdicts or verdicts entered during a particular period of will count.[758]

Anyone can register as a juror on the iCourthouse.com, giving verdicts, comments and asking the disputants questions. In my perspective, at the early stage of a cybercourt, this opening might be a good idea to get everyone aware of and involved in the cybercourt system, but as the e-court system matures gradually, it is worthy concerned on the next step that whether the election of jurors should be restricted according to a certain standard, because it is a question of the quality of jury verdicts in doubt.

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[754] Ponte & Cavenagh (2005), p.102-107.

[755] Trial books are where you post the evidence and arguments for the claim, an example is available at http://www.icourthouse.com (last visited 9 May 2007).

[756] Available at http://www.icourthouse.com.

[757] Ponte & Cavenagh (2005), p.104.

[758] *Ibid*, p.104-105.

6.2.6 Summary of ODR Methods

Figure 6: Comparison of ODR Methods[759]

Main ODR Methods	Negotiation	Mediation	Arbitration	Med-Arb	Cybercourt
Type of Process	Settlement	Settlement	Adjudicatory	Settlement & Adjudicatory	Adjudicatory
Main Online Technologies	Email; Software; Bulletin Boards & Chat Rooms	Email; List Services; Bulletin Boards & Chat Rooms	Email; Video Conferencing; Streaming video over Web	Email; List services; Bulletin Boards; Chat Room; Video Conferencing & Streaming video over Web	Interactive Forms & any methods used in Meb-Arb
Role of Third-Party Neutral	None	Mediator	Arbitrator	Mediator & Arbitrator	Judge & Juries
Nature of Party Participation	Voluntary	Voluntary, or by agreement	Voluntary, or by agreement	Voluntary, or by agreement	By agreement only
Use of Witnesses /Documentary Evidence	Not generally utilized	Not generally utilized	Allowed, but may be limited	Allowed, by may be limited	Generally utilised
Privacy of Proceedings	Confidential	Confidential, unless otherwise agreed to by parties	Confidential, unless otherwise agreed to by parties	Confidential, unless otherwise agreed to by parties	Publicity (Open Hearing)
Nature of Outcomes	Nonbinding, unless parties enter into settlement contract	Confidential, unless parties enter into settlement contract	May be nonbinding or binding with limited grounds for appeal, depending on party agreement	May be nonbinding or binding with limited grounds for appeal, depending on party agreement	Binding result or by party agreement
Enforcement of Outcomes	By contract	By contract	Valid arbitration awards enforceable in court	By contract for mediation; valid arbitration awards enforcement in court	Judicial awards enforcement in court

[759] Ponte & Cavenagh (2005), p.23, Upgrade of "Table 2-1: Summary of Main Characteristics of ODR Methods".

6.3 Current Legislations

6.3.1 International

The Internet brings together people not only operating under different legal systems, but also people of widely disparate cultural backgrounds. Legal difficulties stem from a basic distrust of the Internet today, because it has grown and is still growing too fast for society to assimilate. Linguistic differences echo cultural differences and therefore translations often fail to bridge the gaps in parties' understandings and expectations. In conjunction with the above difficulties, there are also technical, social and political difficulties. The discussed points, as expressed above, raise a question: how can international legislation take into account all these varieties?

Given the divergence of legal rules concerning jurisdiction and choice of law in different countries, it would be difficult at present to envision creating an entity, such as a Global Online Standards Commission, that would have prescriptive, regulatory, or enforcement jurisdiction. Jurisdictional complexity is thus a barrier to creating an international treaty based entity to regular ODR providers.[760]

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[760] Survey: Addressing Disputes in Electronic Commerce: Final Recommendations and Report, (November 2002) 58 *Bus. Law*, 415, p.450, produced by the American Bar Association's Task Force on Electronic Commerce and Alternative Dispute Resolution in Cooperation with the Shidler Center for Law, Commerce and Technology, University of Washington School of Law. (thereafter called "***ODR Survey (2002)***"), available at http://www.abanet.org/dispute/documents/FinalReport102802.pdf (last visited 28 August 2007).

However, the existing UNCITRAL Model Law on International Commercial Arbitration[761] may, at this current stage, be useful to international online arbitration. Article 1 of the Model Law states that arbitration is international if:

> "the parties to an arbitration agreement have, at the time of the conclusion of that agreement, their places of business in different states; or one of the following places is situated outside the State in which the parties have their places of business: (i) the place of arbitration if determined in, or pursuant to, the arbitration agreement; (ii) any place where a substantial part of the obligations of the commercial relationship is to be performed or the place with which the subject-matter of the dispute is most closely connected; or (iii) the parties have expressly agreed that the subject-matter of the arbitration agreement relates to more than one country."

However, international online arbitration cannot truly come into its own as a recognised method of resolving disputes with the existing off-line arbitration legislation, unless the international community can resolve nine major legal issues that online arbitration participants will face:

"1. What form must an online arbitration agreement take?

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[761] UNCITRAL Model Law on International Commercial Arbitration, U.N. GAOR, 40th Sess., Supp. No. 53, at 81, UN. Doc. A/CN.9/XVIII/CRP.4 and Add. 1 (1985).

2. Who should hear the dispute?

3. Where will arbitration occur?

4. What law will govern the online international arbitration?

5. Who will pay online arbitration costs and what will they consist of?

6. What time limits will govern online arbitration?

7. What evidentiary rules will govern online arbitration?

8. What form will the award take and how will it be enforced?

9. Is confidentiality feasible and advisable in online international arbitration?"[762]

These are nine crucial issues, for which meaningful and uniform standards will have to be agreed upon by the global community to ensure the success of online international arbitration. The core issue is the uncertainty of "e-awards".

The applicable law issue in online disputes should be solved *prima facie* and according to simple and automatic rules. The UNCITRAL Arbitration Rules suggest that, unless agreed upon by the parties, the tribunal shall apply the law determined by "the conflicts of laws rules, which it considers applicable".[763] Another solution would be to impose on the parties in an online arbitration, or at least to suggest to them, that they give the arbitrator

[762] Witt (2001), 441, p.442.

[763] Article 28 of the UNCITRAL Model Law on International Commercial Arbitration.

the powers of an "amiable compositor", thus apply an international *lex mercatoria*.[764]

Since there are no uniform rules of ODR at the international level, international ADR organizations need to work together to develop some basic standards for specialized ODR training and practice. Issues such as confidentiality, impartiality, conflicts of interest, ODR disclosure policies, educational and training requirements, linguistic and cultural skills, and adequate party representation need to be fully addressed and applied to ODR service providers.[765] In addition, there needs to be international cooperation and agreement on the enforcement, jurisdiction and choice of law issues of ODR settlements.

6.3.2 EU

In the EU, Article 17 of the E-Commerce Directive is in favour of online dispute resolution, which requires that "member states shall ensure that, in the event of disagreement between an information society service provider and the recipient of the service, their legislation does not hamper the use of out-of-court schemes, available under national law, for dispute settlement, including appropriate electronic means"[766]. In addition, it requires member states to "encourage bodies, responsible for the out-of-court settlement of, in particular consumer disputes to operate in a way which provides adequate procedural guarantees for

[764] Witt (2001), 441, p.452.

[765] Ponte (Spring 2001), 55, p.87.

[766] Article 17(1) of the EC Directive on Electronic Commerce.

the parties concerned"[767] and to "encourage bodies responsible for out-of-court dispute settlement to inform the Commission of the significant decision they take regarding Information Society services and to transmit any other information on the practices, usages, or customs relating to electronic commerce".[768]

An example of ADR in the EU can be given by the Czech Arbitration Court, which is attached to the Economic Chamber of the Czech Republic and Agricultural Chamber of the Czech Republic. The Czech Arbitration Court was appointed by EURid on 12 April 2005 to provide alternative dispute resolution (ADR) for .eu domain name disputes.[769] It sets up the ADR rules called ".eu Alternative Dispute Resolution Rules" which applies to all Complaints filed on or after 7 December 2005.[770] The Czech Arbitration Court is now able to administer .eu ADR Proceedings in practically all official EU languages. The online platform of the Czech Arbitration Court has been translated in these languages; and, a Complaint can be filed in almost any official EU language and the implementation of the remaining languages is well underway. The online ADR platform can be illustrated as the following steps:

- Register yourself as a new user by clicking on the button "Register New User".
- Login to the online platform.

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[767] Article 17(2) of the EC Directive on Electronic Commerce.

[768] Article 17(3) of the EC Directive on Electronic Commerce.

[769] Available at http://www.adreu.eurid.eu/about_us/court/index.php (last visited on 11 April 2006).

[770] ".eu Alternative Dispute Resolution Rules (the 'ADR Rules')", available at http://www.adr.eu (last visited 11 April 2006).

- Start a new dispute by clicking on the button "Star New Dispute".
- Choose the language and then click on "File the Form".
- Fill out the complaint form.
- Sent the Complaint automatically to the Czech Arbitration by clicking "File Complaint".

At any time during the ADR Proceeding, it is possible to change your personal details by clicking on "My Menu" and then "Change of user details". It is possible as well to add a Representative or change the information given to him by following the links "My Menu," and then "My Representatives" and selecting the options to add or edit.[771]

Although ADR.eu is just applicable to domain names, these ADR Rules and the online ADR service platform sets a good example for the new online ADR service in the future. The most successful ADR service provider is the World Intellectual Property Organization (WIPO), which is the first domain name dispute resolution service provider to be accredited by the Internet Corporation for Assigned Names and Numbers (ICANN), and the first to receive a case under the Uniform Domain Name Dispute Resolution Policy (UDRP).[772] The reasons for WIPO's success are: time and cost effective, and also the enforceability of the outcomes of domain names disputes. The outcome of domain name

[771] Available at http://www.adreu.eurid.eu/index.php (last visited on 11 April 2006).

[772] "Guide to WIPO Domain Name Dispute Resolution", available at http://www.wipo.int/freepublications/en/arbitration/892/wipo_pub_892.pdf (last visited on 09 August 2006).

cases is limited to the transfer or cancellation of the domain name. Cases can be decided by panellists appointed by the Centre or by the parties from a special WIPO list. Transfer decisions are implemented directly by domain name registrars.[773] In my opinion, ODR providers can register a website such as "odr.eu" or "edispute.eu", providing dispute resolutions to wider electronic commerce disputes, for instance, electronic contracts. Moreover, the WIPO ADR centre, and .eu ADR Rules and its web service can become a vital model for proposing an overarching ODR regulation in the EU.

6.3.3 US

In the US, ODR providers are increasingly facing calls for self-regulation and adoption of best practice guidelines. During the summer of 2002, the American Bar Association (ABA) Task Force on Electronic Commerce and Alternative Dispute Resolution addressed the final recommendations and report on disputes in electronic commerce.[774] The Report emphasizes that an ODR transaction is indeed an e-commerce transaction in and of itself. Thus, as Internet merchants, ODR providers should adhere to adequate standards and codes of conduct. The ABA essentially recommends that ODR providers strive to achieve transparency through information and disclosure as a basis to achieve sustainability. These Recommended Best Practices contain many principles applicable in both B2B and B2C disputes. It is recommended to enable disputants to make intelligent choices concerning

[773] "Dispute Resolution for the 21st Century", available at http://www.wipo.int/freepublications/en/arbitration/779/wipo_pub_779.pdf (last visited on 09 August 2006).
[774] ODR Survey (2002).

ODR providers, to help give them confidence in the efficacy of ODR and therefore to encourage the disputants to use ODR as a means of obtaining resolution of their complaints.[775] The recommended course of action include: (i) publishing statistical reports; (ii) employing identifiable and accessible data formats; (iii) presenting printable and downloadable information; (iv) publishing decisions with whatever safeguards to prevent party identification; (v) describing the types of services provided; (vi) affirming due process guarantees; (vii) disclosing minimum technology requirements to utilise the provider's technology; (viii) disclosing all fees and expenses to use ODR services; (ix) disclosing qualifications and responsibilities of neutrals; (x) disclosing jurisdiction, choice of law and enforcement clauses, for example, ODR providers should disclose the jurisdiction where complaints against the ODR provider can be brought, and any relevant jurisdictional limitations.[776] The Task Force believes that the types of disclosures outlined in the recommendations will help to instil confidence and trust in the new ODR industry and marketplace.[777]

iADR Centre, a non-profit, educational and informational entity, is also recommended by the Task Force. The iADR Centre is most likely to gain traction with various stakeholders including government entities, Internet merchants, ODR service providers, and consumers

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[775] ODR Survey (2002), 415, p.444.

[776] Annex A of "Recommended Best Practices by Online Dispute Resolution Service Providers", ODR Survey (2002), 415, p.458.

[777] ODR Survey (2002), 415, p.445.

at this juncture. At present, the Task Force has recommended the creation of a web-based entity that would perform the following task:[778]

"1) Disseminate information concerning the Recommended Best Practices, along with information concerning existing ODR codes of practice;

2) List and provide information concerning the available ODR/ADR service providers available for the resolution of e-commerce disputes;

3) Develop and/or disseminate sample complaints handling, privacy and best practices forms, codes, standards, and guidelines; and

4) Provide all information on a multilingual basis via the World Wide Web."

In addition, to perform the above task efficiently, the Task Force also suggests that this entity should be consistent with official statements of the US and EU governments. In my view, the successful establishment of the iADR Centre will be a leading worldwide ODR private organization, which performs a similar function to the International Chamber of Commerce (ICC) in the future. I believe that it will help to boost users' e-confidence and trust.

The Centre for Information Technology and Dispute Resolution of UMass Amherst offers a complete and updated list of ODR providers around the world.[779] Four examples are given

[778] ODR Survey (2002), 415, p.450.

[779] http://www.ombuds.org/center/index.html

as below:

Blind Bidding

Blind bidding systems allow parties in a dispute to submit settlement offers to a computer, and if the offers are within a certain range, often 30% of each other, the parties agree to settle and split the difference.[780] Cybersettle & ClinkNsettle provide successful blind bidding services. Take clickNsettle website[781] as an example, clickNsettle, allows many rounds of offers and counteroffers within a specified period of time. To ensure that the negotiations take place in good faith, parties are required to increase (or decrease) their offer (or counteroffer) by a specified percentage over their previous offer (or counteroffer). If a settlement is not reached within the specified time period, then the offers expire and the cyber-negotiation fails.[782]

What is attractive about blind bidding is that if no settlement is reached, the offers are never revealed to the other party. This is intended to encourage parties to be more truthful about what their "bottom line" might be.[783] The parties are, of course, free to resubmit their claim or move forward with another dispute resolution mechanism, such as mediation, arbitration, or even litigation.

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[780] Katsh & Rifkin (2001), p.61.

[781] http://www.clicknsettle.com (last visited 30 March 2006).

[782] Ponte (2002), 441, p.442-44.

[783] Katsh & Rifkin (2001), p.61.

Cyber Negotiation

SmartSettle,[784] originally called OneAccord, is a much more sophisticated negotiation software than the blind bidding systems. SmartSettle is intended for use in disputes that are simple or complex, single issue or multi issues, two parties or multi parties, composed of quantitative or qualitative issues, of short or long duration, and involving interdependent factors and issues.[785]

Cyber Mediation

Concerning cyber mediation, SquareTrade[786] and Internet Neutral website[787] set clear examples. Take Internet Neutral as a sample, it allows the parties to choose from several online mediation alternatives, including e-mail, instant messaging, chat conference rooms, and video conferencing. Internet Neutral uses conferencing software that enables the mediator to communicate with the parties in designated channels or "rooms" accessed by passwords. During the mediation, the software enables the parties to communicate through two channels: one channel is for a private dialogue between one party and the mediator, while the other channel is an open dialogue with all participants, including the mediator.[788]

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[784] Available at http://www.smartsettle.com (last visited 8 May 2007).

[785] Katsh & Rifkin (2001), p.62.

[786] Available at http://www.squaretrade.com (last visited 9 May 2007).

[787] Available at http://www.internetneutral.com (lat visited 30 March 2006).

[788] Goodman (2003), p.4.

Cyber Arbitration

AAA Webfile[789] is organised by the American Arbitration Association, providing Internet-based arbitration services. Using the AAA Webfile, the disputants are required: first, to register as a new user; second, enter the claimant/clamant representative information as well as the respondent/respondent representative information; third, enter the claim information and the claim summary; fourth, submit your credit card payment. The third step is a core procedure. The claim information will include the selection of the set of rules to apply and whether you're filing an arbitration or mediation. Once you choose online arbitration, you will need to select the numbers of arbitrators required for your claim, review your arbitration clause to see if the number of arbitrators is addressed, enter the contract date and enter the city and state of the hearing locale your prefer.

Compared to cyber negotiation and mediation, cyber arbitration is more complicated, strict and expensive, so that there are less online arbitration service providers. But whatever methods the disputants choose, the most significant concern is whether ODR providers they are with are offering quality conflict resolution services. If ODR providers apply to the formal standards for the practice of ODR, such as the Best Practice Guidelines, and take part in the uniform specialized training for ODR practitioner, for example, with the iADR Centre. It will provide the disputants a level of confidence about their ODR provider regarding basic standards of quality and fairness.

[789] http://www.odr.org (last visited 6 April 2006).

6.3.4 China

In China, on 31 August 1994, the Arbitration Law was promulgated by the Chinese National People's Congress with the aim of establishing a coherent nationwide arbitral system, entering into force on 1 September 1995. In accordance with the Arbitration Law, establishment of online arbitrations is subject to the restrictions and requirements for market entry. For example, arbitration commissions shall be registered with the local judicial administrative department and organised by the local government and the chamber of commerce.[790] Moreover, an arbitration commission shall have its own name, domicile and charter, possess the necessary property, and have its own staff and arbitrators for appointment.[791] An arbitration commission shall be comprised of a chairman, two or four vice-chairman and seven to eleven members. The arbitration commission shall appoint fair and honest person as its arbitrators.[792]

Arbitration commissions are members of the China Arbitration Association, which is a self-regulatory organization of arbitration commissions responsible for maintaining professional discipline among the commissions. They supervise the arbitration commissions, their members and arbitrators in accordance with the charter. Thus, if an

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[790] Article 10 of the Arbitration Law of the People's Republic of China, Adopted at the 8th Session of the Standing Committee of the 8th National People's Congress and promulgated on August 31, 1994, available at http://english.sohu.com/2004/07/04/78/article220847885.shtml (last visited 4 September 2007).

[791] Article 11 of the Arbitration Law of the People's Republic of China.

[792] Article 13 of the Arbitration Law of the People's Republic of China.

ODR service provider really intends to label its service as "arbitration", it would have to carefully select the location of its headquarters, obtain approval from local government and chamber of commerce, apply to the competent authority for registration provided that it has fulfilled all the conditions of formation, and become a member of the China Arbitration Association.[793]

In my opinion, since ODR is borderless, the arbitration commission registration methods in China are too restrictive. The Arbitration Law in 1995 is not practical in the new age of cyber arbitration. There should be uniform online arbitration or even ODR registration regulation in national legislation to avoid the differences of local governments' policies.

With respect to mediation, the culture in China is different from the West. Traditionally, the Chinese concept of mediation has deep roots in Confusian philosophy, ideals such as harmony, peace and stability. It may be characterised, on one hand, as a flexible and blended procedure of concessions, arrangements and compromises, while at other times it may take on some of the compelling aspects of adjudication.[794] In the digital era, the Chinese cultural background will most certainly influence people's behaviour when using online dispute resolution. It has given some thought to legislators that ODR providers should be obliged to express and teach the terms and conditions of mediation before

[793] Xue (2004), 377, p.380.

[794] *Ibid*, p.390.

participants use it, because the ODR users can understand the functions of mediation and better utilise the system, and it will deduct the possibility of further confusion and miscommunication.

Regarding the legislation on mediation, on 5 May 1989, the state Council enacted the Organic Regulations on the People's Mediation Committees, which entered into force on the same date. An online mediation process may be established without any legal barriers from the Organic Regulations on People's Mediation Committee, after obtaining all the necessary approval for the establishment of an enterprise and registration with competent authorities. This seems to comply with the electronic free market entry principle. However, it is doubted that whether Chinese legislation has taken sufficient procedures to ensure the confidentiality and privacy on online mediation.[795] In my view, this should be a significant focus point for any future ODR regulations.

China Electronic Commerce Legal Network Company in conjunction with China Legal and Political Committee of Electronic Commerce, established the first China Online Dispute Resolution Canter (China ODR) and its website http://www.odr.com.cn. This ODR Centre specialises in two services, online negotiation and online mediation. Any of the disputants can register their case online and apply for online dispute resolution. The Centre will then notify the other party through electronic means. If the other party agrees to use

[795] Xue (2003), p.16.

the online dispute mechanism, both parties will have to choose one of the dispute resolution methods, online negotiation or online mediation, and then start their procedures.[796]

6.4 Analysis: Successful experiences to be learned

6.4.1 Cybercourts

Cybercourts provide dispute resolution services, both litigation and court-based ADR, using electronic communications. They generate confidence among the general public and their users for the following reasons: (1) they have tangible features: such a court is held in a building, thereby providing many points of reference and history indicating that it can be trusted; (2) The judges already have a well established reputation and the courts are very well integrated in many social contexts; (3) Courts are a reference in society because they are integrated into an already existing architecture of confidence.[797]

A successful example can be provided by the Michigan Supreme Court (MSC) for the creation of the Michigan Cybercourt, which aims at developing technology throughout Michigan's judiciary as well as a forum for the expeditious resolution of complex business litigation. The court involves a mobile, virtual court with no fixed locations, and it uses various legal technologies to store, share, and present evidence over the Internet between

[796] Available at http://www.odr.com.cn/ (last visited 3 September 2007).

[797] Schultz (Fall 2004), 71, p.104.

lawyers, ADR providers and courts. It recommends a series of e-court mechanisms, such as E-filing, Document Management System (DMS), Case Management System (CMS), Evidence and Media Presentation System (EMPS), Teleconferencing/Video Conferencing, and Digital Recording. [798] The Michigan Cybercourt collaborates with high-tech companies and employs highly educated staff. Instead of hearings in person, arguments and testimony can be presented via teleconference; evidence can be evaluated through streaming video or digital still images.[799]

According to the 2001 Michigan Public Acts 262, the Cybercourt has concurrent jurisdiction over commercial litigation in disputes where the amount in controversy exceeds $25,000.00.[800] Judges appointed to sit on the Cybercourt should have either commercial litigation experience or an interest in technology.[801] Parties who participate in the Cybercourt are deemed to have waived their right to a jury trial.[802] The defendant, however, has the right to remove the case to a state circuit court.[803] It also states that all actions heard in the Cybercourt can be conducted by means of "electronic communications", which include, but not limited to, "video and audio conferencing and

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[798] Michigan Cyber Court, available at http://michigancybercourt.net/Documents/court-docs.htm (last visited on 29 Nov 2006).

[799] Ponte & Cavenagh (2005), p.110.

[800] 2001 Mich. Pub. Acts 262, 8005, available at http://www.michiganlegislature.org/mileg.asp?page=getObject&objName=2001-HB-4140&userid= (last visited on 29 Nov 2006), cited from Exon (Winter 2002), 1, p.8.

[801] 2001 Mich. Pub. Acts 262, 8003.

[802] 2001 Mich. Pub. Acts 262, 8009.

[803] 2001 Mich. Pub. Acts 262, 8007(1).

Internet conferencing among the judge and court personnel, parties, witnesses, and other persons necessary to the proceeding."[804] Although the judge might still hear the case in a courtroom like space for appearance's sake, witnesses, litigations, and lawyers can participate from their offices. The public can observe online the Cybercourt's proceedings.[805]

As discussed earlier, there are several countries, which have launched cybercourts. Different national cybercourts will certainly have different standards or procedures. At the present time, a cybercourt can be located in a specific tangible building, like for instance the Michigan Cybercourt situated in the premises of the Michigan Court. However, in future, in case of increased e-courts demand, to avoid being short of facilities or qualified staff in one specific location, and, for the sake of convenience and efficiency, e-courts might eventually have venues in various places. To overcome those barriers, in my opinion, an international cybercourt system should be introduced, with uniform online litigation proceedings. It would in particular be suitable to disputes involving an international element in cyberspace.

The "International Cybercourt of Justice", or "International Cybercourt Central",[806] could be regarded as a full-scale cybercourt, which would benefit participating countries

[804] 2001 Mich. Pub. Acts 262, 8011.

[805] Ponte & Cavenage (2005), p.111.

[806] Exon (Winter 2002), 1, p.5.

immensely, because it would eliminate problems concerning recognition of foreign judgments. Participating nations would gain the benefit of enforcing cyber laws against foreign individuals in return for agreeing to recognise the international court's judgments against their own citizens.[807]

Any number of consenting countries could create a Cybercourt Central pursuant to a treaty, convention or any other agreement, similar to the creation of the International Court of Justice, the European Court of Justice or the European Court of Human Rights.[808] Its aim should be to create a dispute resolution forum that is just, fair, impartial, convenient, practical, and economical for all parties concerned.[809]

The Cybercourt Central Agreement would contain basic terms and provisions including "(1) duties and responsibilities of the parties; (2) user conduct whereby the disputing parties would agree not to use Cybercourt Central to harass or defame others or otherwise use Cybercourt Central for any unlawful purpose; (3) privacy provisions whereby Cybercourt Central would maintain the confidentiality of each cybercase file and allow access to it only those who have a user ID and password; and (4) indemnification to the court for any technological malfunction during an electronic filing or loss of confidential material in the

[807] Windham (Fall 2005), 1, p.5.

[808] Perritt (1998), 1121, p.1147.

[809] Exon (Winter 2002), 1, p.36.

cybercase file; (5) choice of law provisions".[810]

The currently debated issue is how much electronic communication must be used to constitute a cybercourt? It is hard to calculate time, quantity and frequency with electronic communication. But it should be at least clear that the basic amount of electronic communication used in cybercourts would necessitate the creation of the disputants' electronic IDs, submission of case e-documents or e-evidence through a secure database, e-court procedures, hearings and production of court judgments electronically.

On the basis of the Michigan Cyber Court's experience, although courts have the advantage of publicity and accountability, some other fundamental issues of cybercourts need to be discussed such as functional equivalence of e-documents and e-evidence, jurisdiction, choice of law, enforceability of judgments and choice of court, which are similar to basic elements of the entire ODR system. We will further examine eADR below and recommend the core principles and codes of conduct for ODR.

6.4.2 eADR

An example can be given by eBay e-trust strategies: in order to attract a maximum of sellers and buyers to the marketplace, eBay is engaged in making customers comfortable in buying and selling at eBay through a variety of trust building measures like the mutual

[810] Exon (Winter 2002), 1, p.12.

rating system which allows for online reputation, identity verification, secure online payment services like PayPal or Escrow, insurance, and last but not least the online dispute resolution (ODR) service of SquareTrade.[811]

ODR, defined as both cybercourts and an extension of ADR, has become one which not only concerns speedy and cost-effective techniques especially in resolving cross-border disputes, but affects trust and confidence of electronic commercial transactions in the e-marketplace, because it diminishes the risk that e-commerce actors are left with no redress if contracts are not performed.

There are two successful experiences of ODR: one is the WIPO-UDRP (World Intellectual Property Organization - Domain Name Dispute Resolution Policy), and the other is SquareTrade.

WIPO-UDRP

Scholars identify the following six specific reasons for the success of UDRP:[812]

1. The participation of WIPO adds ***credibility*** to the process.
2. ***Transparency*** of the procedure: decisions are available online immediately in full text.

[811] Calliess (2006), 647, 652.

[812] Motion (2005), p.137-169, 148, in Edwards (ed. 2005), see also UDRP official documents available at http://www.icann.org/udrp/ (last visited 3 September 2007).

3. ***Self-executing*:** two months after filing, the case is closed. Foreign authorities cannot block the outcome.
4. ***Compulsory:*** the UDRP clause is imposed on every dot.com registrant. Trademark owners can force registrants to undergo the procedure.
5. The subject matter of domain names is publicity sensitive, hence, attracting press interest, which imposes a degree of public ***accountability***.
6. ***Efficiency*** – all interaction is electronic. This forces people to deal with the matter by electronic means solely, quickly and efficiently.

SquareTrade

SquareTrade is an independent private ODR provider established in 1999. It views its role as establishing trust in online transaction by providing an effective means for the resolution of individual disputes. It deals with "dispute involving non-delivery of goods or services, misrepresentation, improper selling practices, un-honoured guarantees or warranties, unsatisfactory services, credit and billing problems, unfulfilled contracts, etc."[813] The general operation of eBay-SquareTrade system can be described as:

(1) The first stage of SquareTrade's dispute resolution system consists of an automated negotiation platform, offered to eBay members free of charge.[814]

(2) In the second stage, those disputes not resolved through automated negotiation

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[813] http://www.squaretrade.com (last visited on 29 November 2006).

[814] Rabinovich – Einy (Spring 2006), 253, p.258.

are referred to online mediation, offered by SquareTrade for a nominal sum of fees to eBay users.[815]

SquareTrade not only offers dispute resolution services to eBay users, but also provides trust seals, which is also called "Seal Membership"[816]. The seal, to an even greater extent than SquareTrade's dispute resolution services, is a distinctive eBay service. Under this system, Square Trade verifies the identity and address of eBay sellers, who, in return, commit to a specified set of selling standards and pay a low fee to SquareTrade. The seal is an icon that is displayed by the sellers's ID on eBay but remains under the complete control of SquareTrade. SquareTrade can follow trends on buyer activities and habits since these patterns are recorded when buyers click on the seal. It can also remove the seal icon at any time should a seller no longer meet the requirements.[817]

Most importantly, the SquareTrade experience points to new possibilities for addressing one of the most difficult problems in the mediation world – the accountability dilemma. This dilemma stems from the fact that accountability hinges on transparency and structure, while mediation's strength is drawn, to a large extent, from its confidentiality and flexibility.[818] An essential component in SquareTrade's accountability system is its

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[815] Rabinovich – Einy (Spring 2006), 253, p.259.

[816] See general at http://www.squaretrade.com (last visited on 29 November 2006).

[817] Rabinovich – Einy (Spring 2006), 253, p.259.

[818] *Ibid*, p.256.

substantial database on resolution efforts. SquareTrade has managed to gather extensive information internally without completely foregoing confidentiality externally. SquareTrade collects a vast amount of information on the services it provides, much of which is gathered in real time, simultaneously with the act of participation in the ODR process. The information is gathered and remains accessible to SquareTrade, the mediator and the parties for up to one year.[819] SquareTrade also collects the other data information in seal application and the user registration form. At the conclusion of the dispute resolution process, SquareTrade records "Resolution Behaviour Information", which is comprised of information on whether a party participated in the process to completion, whether an agreement was reached, whether the party accepted or rejected a mediator's recommendation, and, with respect to a respondent, whether the person had been involved in multiple cases of this type.[820]

Moreover, the typical eBay dispute concerns objective technicalities and does not produce tensions and emotions that require a confidential setting for its resolution, as do, for example, disputes involving trade secrets or sexual harassment.[821]

Finally, eBay refers its users exclusively to SquareTrade though a link on its website, thus,

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[819] *Ibid*, p.270.

[820] Square Trade Privacy Policy, available at http://www.squaretrade.com/cnt/jsp/lgl/user_conf_agree.jsp?vhostid=chipotle&stmp=squaretradeconf_infocollect (last visited on 29 November 2006).

[821] http://www.squaretrade.com (last visited on 29 November 2006).

SquareTrade's position is practically that of an in-house dispute resolution provider that is embedded in the fabric of the organization to which it provides its services, and as such, offers some of the same possibilities but also raises similar concerns.[822] SquareTrade has the advantage of taking a high volume of disputes, thereby revealing any chronic deficiencies in the dispute resolution system itself. It might be necessary to improve its services, by improving incentives for the participation and enforcement of settlements through insisting on disputing parties' long-term interests such as reputation rating, feedback rating and seal membership.[823]

AAA – Cybersettle

October 2, 2006 – the American Arbitration Association (AAA) and Cybersettle, Inc. announced a strategic alliance that will provide clients of both companies with the opportunity to use the dispute resolution services of both companies exclusively. With the goal of "ensuring that no one walks away without a resolution", AAA clients using the AAA's online case management tools will be able to attempt settlement with Cybersettle before AAA neutrals are selected. And Cybersettle clients who have not been able to reach settlement through online negotiation will be able to switch to the AAA's dispute resolution processes, including conciliation, mediation, and arbitration.[824]

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[822] Rabinovich – Einy (Spring 2006), 253, p.278.

[823] *Ibid*, p.279-281.

[824] "AAA anc Cybersettle Sign Unique Partnership Agreement", available at http://www.adr.org/sp.asp?id=28818 (last visited on 14th Dec 2006).

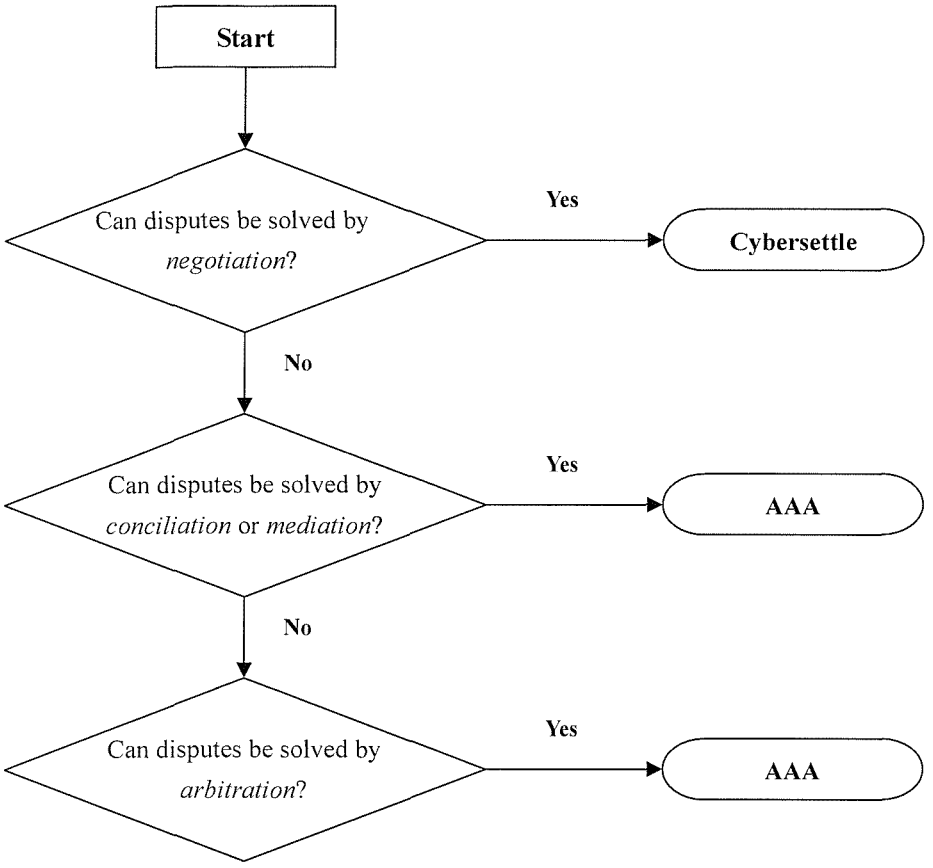

Figure 1: AAA-Cybersettle Strategic Alliance

The benefits of the cooperation between AAA and Cybersettle are threefold:

(1) **Reputation and Merits**. The AAA is a non-profit making public service organisation. It also serves as a centre for education and training, issues specialised publications, and conducts research on all forms of out-of-court dispute settlement. Cybersettle, for instance, a pioneer in online negotiation, is the inventor and

patent-holder of the online double-blind bid system.[825]

(2) **Experiences**. AAA offers a broad range of dispute resolution services to business executives, attorneys, individuals, trade associations, unions, management, consumers, families, communities, and all levels of government, while since 1996 Cybersettle has handled more than 162,000 transactions, with more than $1.2 billion in settlements.[826]

(3) **Professional Regulations**. AAA has Commercial Arbitration Rules and Mediation Procedures, including Procedures for Large, Complex Commercial Disputes; as well as Supplementary Rules for the Resolution of Patent Disputes and a Practical Guide on Drafting Dispute Resolution Clauses, including negotiation, mediation, arbitration and large, complex cases. Cybersettle can contribute its private practices and work with AAA to promote other services when appropriate and to make joint proposals and business presentations under certain circumstances.[827]

When comparing the WIPO-UDRP, SquareTrade and AAA-Cybersettle examples, what is striking is that these three ODR service providers do not only make a very attractive offer for easy accessible, quick, effective, and low-cost dispute resolution, but most importantly have succeeded in integrating their offer to the primary markets for domain name

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[825] See general at http://www.adr.org (last visited on 14th Dec 2006).

[826] Available at http://www.adr.org/sp.asp?id=28818 (last visited on 14th Dec 2006).

[827] See general at http://www.adr.org (last visited on 14th Dec 2006).

registration and e-commerce, where online disputes evolve.[828]

This integration is brought about in all these three cases by cooperation agreements with the primary market makers, for example, WIPO-UDRP with ICANN (the Internet Corporation for Assigned Names and Numbers); SquareTrade with eBay, and Cybersettle with AAA, and by creating socio-legal bonds for potential dispute parties to commit to the process.[829] That is, the ICANN UDRP administrative procedure is mandatory to domain name holders, whilst the SquareTrade mediation process is mandatory to eBay-sellers.

One more additional credential which makes WIPO-UDRP successful is that ICANN WIPO has a self-enforcement mechanism. The ICANN accredited-registrars reserve the rights to transfer or cancel a domain name directly.[830]

But in the future, how can the existing ODR service providers improve? And how can the newly established ones learn from the past achievements?

To answer this question, we must understand three fundamental features or building blocks

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[828] Calliess (2006), 647, p.653.

[829] In my perspective, "social-legal bones" means the combination of the powers between social organizations and legislation. The term "legal bond" is being used in a very broad sense, including not only contractual design but also all kinds of "private ordering", see more details in http://odrworkshop.info/papers2005/odrworkshop2005Bol.pdf

[830] Available at http://www.icann.org/tlds/agreements/name/registry-agmt-appl-03jul01.htm (last visited 3 September 2007).

of any ODR system, that is: "1) Convenience; 2) Trust; 3) Expertise".[831]

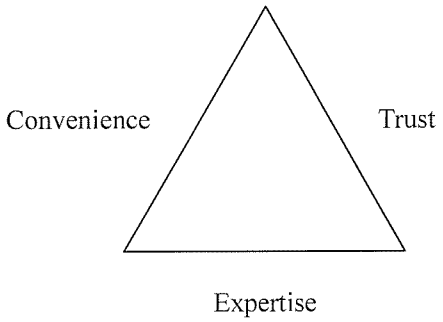

Figure 7: Three Fundamental Features of ODR[832]

With offline disputes, ODR is likely to surface as an add-on to other already existing processes. There will then be a choice between ODR and ADR processes, and some assessment will have to be made of the relative amount of convenience, trust and expertise provided by each dispute resolution process.[833]

Convenience, trust and expertise, these factors are generally not independent of each other. In other words, if the level of one factor is changed, the level of some other factor may be affected. Raising one factor a lot may lower another factor a little, often a beneficial trade-off. Or, raising one factor a lot may, at the same time, also raise the level of some

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[831] Katsh & Rifkin (2001), p.73.

[832] *Ibid*, p.75.

[833] *Ibid.*

other factor, almost certainly a desirable outcome.[834]

What is challenging is that the impact of making changes in a system will depend on who the parties are and what the context is. There is often a trade-off between the power of an application (expertise) and how complicated it is to use (convenience).[835]

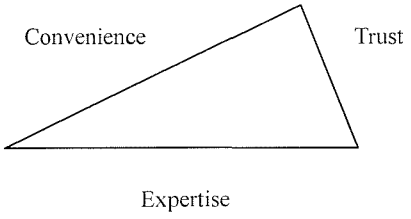

Figure 8: ICCAN-UDRP Diagram[836]

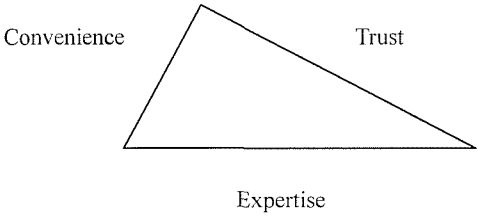

Figure 9: SmartSettle Negotiation Diagram[837]

As we can see from the above diagrams, when the process is fairly high on convenience and expertise, something to do with trust, legitimacy and fairness is quite weak. On the opposite, where the expertise and trust levels are very high, the convenience is low. It might be possible that when it is short of expertise, parties' convenience is increasing alongside with trust because of self-command, such as Blind Bidding System.

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[834] Katsh & Rikfin (2001), p.76.

[835] *Ibid.*

[836] *Ibid.*

[837] *Ibid*, p.77.

6.5 Future of ODR: Recommendations

6.5.1 Core Principles

Accountability (Transparency) v. Confidentiality

Accountability means being answerable to an authority that can mandate desirable conduct and sanction conduct, which breaches identified obligations. [838] Accountability mechanisms fall into two categories: one is *structure* and the other is *transparency*. Accountability can be internal and external, or both. Internal accountability typically promotes self-evaluation and organizational development and enhances management practices and strategic planning through internal measures and review,[839] while external accountability usually involves evaluation of performance and outcomes by a credible external entity (private or public) in the context of predetermined boundaries.[840]

Transparency is one of the strongest elements to induce trust in using ODR, because it provides information for ODR users to determine whether the ODR provider is trustworthy, whether effective redress mechanisms are available, whether the cost and duration is reasonable and whether it is suitable for their nature of disputes.

Due to the functions of transparency, it should be related to three categories: disclosure of

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[838] Minow (2003), 1229, p.1260.

[839] See generally Panel on Accountability and Governance in the Voluntary Sector, Final Report, Building on Strength: Improving Governance and Accountability in Canada's Voluntary Sector (Feb.1999), cited from Rabinovich – Einy (Spring 2006), 253, p.261.

[840] Hayllar (2000), 60, p.68, cited from Rabinovich – Einy (Spring 2006), 253, p.261.

ODR providers, including ownership and location of the provider; disclosure of ODR process, including duration and costs, the character of the outcome (binding or non-binding), and substantive rules or principles governing the merits;[841] and disclosure of neutrals.[842] Particularly, the publication of the results of ODR proceedings seems to be essential for inducing trust in ODR. If one cannot know what results these proceedings produce, one would find it very hard to assess and thus trust them.[843]

On the other hand, confidentiality is another legitimate concern in ODR procedures, that is, the information of disputants and the information gathered during the proceeding will not be disclosed, and the results of the cases will not be published, unless permission is given to do so. Confidentiality creates a safe haven for disputants, allowing them to bring forth disputes that they may not have been willing to pursue through formal, public avenues on one hand, but confidentiality protection of ODR proceedings may reduce the general public's trust in the process and deter future disputants from using it on the other hand.[844]

ODR providers have to strike a balance between the privacy desired by the parties using these techniques, and the transparency, accountability and building of trust, which is

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[841] American Bar Association Task Force on E-commerce and ADR, "Recommended best practices for online dispute resolution service providers", available at www.law.washington.edu/ABA-eADR, p.4.

[842] Kaufmann-Kohler & Schultz (2004), p.110. The term "neutrals" in this chapter means the third parties, including mediators and arbitrators.

[843] Schultz, Kaufmann-Kohler, Langer & Bonnet (2001), p.39.

[844] Unif. Mediation Act, prefatory note (2001).

engendered by publishing the decisions of the ODR provider.[845] So what are the solutions to accommodate these two conflicting needs, namely, transparency *v.* confidentiality?

To my knowledge, confidentiality is more sensitive in B2B matters than B2C, because generally the former ones may involve higher financial stakes as well as a certain level of technique and strategies of business. Therefore, the disclosure of B2B ODR outcomes may affect the reputation of the business and the confidentiality of trade secrets. In principle, information of ODR proceedings and outcomes, which reaches a minimum amount of money and which is deemed to be related to any trade secrets and personal sensitive issues, must be kept confidential, except for the pre-agreements. However, in order to increase trust in their ODR services, ODR providers can still allow the disclosure of those outcomes, when agreed by users or which are beyond the conditions of confidential protection. In addition, ODR providers can report some statistics showing the percentage of dispute settlements, as well as the rate of settlement satisfaction. However, this must be assessed by authorised bodies, such as accreditation agencies. The end of this section reverts to such mechanisms and their functions.

With regards to small-medium entrepreneurs (SMEs), effective structural accountability should be introduced to reconcile confidentiality on one hand with accountability on the other. Effective structural accountability incorporates both internal and external elements.

[845] Motion (2005), p.137-169, 154, in Edwards (ed. 2005).

Internally, goals are defined and targets are set, processes for measuring and monitoring performance are instituted, and improvement is sought. Externally, beyond setting the general framework, particular goals and performance evaluation are audited and questioned in an additional effort to detect and remedy poor performance, misconduct, inefficiencies, and deficient policies.[846]

According to the previous analysis of SquareTrade's successful experience, SquareTrade has generated internal structural accountability by instituting structures for: (1) gathering broad and rich information on neutrals interventions and party needs as well as ongoing efforts to evaluate the quality of services rendered; (2) monitoring neutrals performance; (3) developing the standard of confidentiality; (4) internalising incentives for neutrals to perform well and for the system as a whole to identify deficiencies and successes and learn from them.[847]

SquareTrade's efforts are mainly internal, it still need to work on external accountability such as oversight by a credible, independent entity. External accountability is important to ODR providers, because it can assist providers in questioning the adequacy of the goals themselves and the means used to achieve them; drawing on the information revealed in the course of monitoring as well as own experience and knowledge from other setting;

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[846] Rabinovich – Einy (Spring 2006), 253, p.269.

[847] *Ibid*, p.282.

revealing those instances of poor performance missed in the internal examination and providing an impartial evaluation of potential conflicts of interests between providers.[848] After all, external accountability can be gained by accreditation.

Accessibility

To increase accessibility, a dispute resolution clause should be contained in the general terms and conditions of the contracts. The ODR providers should be reliable to the users to access and review the clauses. The general terms should appear automatically on the screen in full text, or inset an express mention of the arbitration agreement in the reference to the general terms. For example, it may provide that "this order and all aspects of the contractual relationship between the parties are governed by the general terms, including the arbitration agreement, which are made part of this contract and can be accessed by clicking a button – 'I accept the general terms'".

An ODR clause can include the selection forums in the e-contracts. In that regard, there are two special issues to deal with:

(1) Will changing online dispute resolution clauses in online contracts constitute an attempt to materially alter the agreement?

(2) Which rules will be appropriate to the features of online dispute resolution, the last-shot rule or the knock-out rule?

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[848] *Ibid*, p.282-283.

Credibility & Accreditation

Accreditation necessitates for a practitioner to meet certain levels of education, training, or performance in order to practice ODR.[849] Accreditation can be imposed by ODR service providers or by government and international organizations. Accreditation will bring credibility to ODR by ensuring that the practice of ODR is built on a foundation of quality assurance.[850] There are at least four distinct models for accreditation of ADR practitioners as identified by the American Bar Association (2002),[851] that is, accreditation systems can be characterised according to the "hurdles" they set for initial selection of practitioners and the "maintenance" procedures they have in place for ensuring quality practice: Low Hurdles with Low Maintenance; Low Hurdles with High Maintenance; High Hurdles with Low Maintenance; High Hurdles with High Maintenance;

Arguably, each of the above four models could be appropriate in different situations depending on factors such as the client group, the level of acceptance of ODR, and the maturity of ODR practice.[852] The American Bar Association (2002) found that the majority of accreditation systems within the United States currently have fairly low hurdles

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[849] Tyler & Bornstein (Spring 2006), 383.

[850] *Ibid*, p.384.

[851] American Bar Association Section of Dispute Resolution Task Force on Credentialing: Discussion Draft – Report on Mediator Credentialing and Quality Assurance, 2002, available at www.abanet.org/dispute/taskforce_report_2003.pdf (last visited 29 November 2006).

[852] Tyler & Bornstein (Spring 2006), 383, p.386.

and maintenance,[853] whilst SquareTrade provides higher hurdles and maintenance.[854] I believe that high hurdles and maintenance will be the direction for the success of future ODR services, because it will reduce practitioner diversity, improve practitioner skills, increase public credibility and assure quality practice.

The criteria for accreditation in ODR include mainly practitioner knowledge, such as technology and language, and practitioner skills, such as maintaining communication and controlling information flow. The standard can be achieved in four ways: 1) incorporation of ODR into current practitioner accreditation systems; 2) independent accreditation of ODR practitioners; 3) accreditation of specialist ODR skills; 4) accrediting agencies to provide ODR.[855] In my opinion, ODR is not only new and challenging for individuals but also for agencies, thus, accreditation systems should consider accrediting both agencies and individuals at the same time. Apparently, the other international organizations such the UN and UNCITRAL have the same strong positions as the ABA to provide ODR accreditation.

Security

Security is another core issue in ODR because it reflects not only the identity but also the

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[853] American Bar Association Section of Dispute Resolution Task Force on Credentialing: Discussion Draft – Report on Mediator Credentialing and Quality Assurance, 2002, available at www.abanet.org/dispute/taskforce_report_2003.pdf (last visited 29 November 2006).

[854] Tyler & Bornstein (Spring 2006), 383, p.388.

[855] *Ibid*, p.390.

protection for confidential information. In the online environment, the identity of the person you are dealing with is not always clear. How can one be sure that the person one is dealing with is who he claims to be? Moreover, ODR providers state that the information collected is treated confidentially, but does this necessarily imply that such information cannot be transmitted or accessed additionally?

Under these circumstances, safeguards have emerged, including development of digital signatures, which provide authentication, integrity of a message, and non-reputation of sending and trust marks. In my opinion, digital signatures must be mandatory to the protection of emails and web-based communications. Standard emails cannot guarantee the requirements of the protection of the confidentiality and integrity of the information, thus, emails in ODR must be secured by digital signature, or its equivalent, such as the Secure Multipurpose Internet Mail Exchange Protocol (S/MIME) and the Pretty Good Privacy (PGP). Furthermore, specific means of protection must also be used when information is communicated by being posted on a website, the most frequent being the Secure Sockets Layer secured the Hypertext Transfer Protocol (SSL-secured HTTP), which provides protection of the confidentiality and integrity of the data transmission. Thus, ODR providers must provide a provision of security in the user agreement. Take SquareTrade as an example, an electronic signatures and writings clause specifies that "you acknowledge and agree that the standards of the Uniform Electronic Transactions Act, adopted in 1999 and applied in the State California." At the international and national levels, there are also

other electronic signatures legislation which can be used for ODR service agreements.

Enforceability

> "The enforcement in court of mediation and negotiation outcomes, on the one hand, and of arbitral awards, on the other hand, follows different procedures. In a nutshell, one may say that the enforcement of the former requires an ordinary court action, whilst the enforcement of the latter can be granted in summary proceedings without a review of the merits of the award."[856]

Since ODR is just an electronic version of traditional negotiation, mediation, arbitration and court litigation, the enforceability of an ODR clause in the contract should be examined according to the enforceability of traditional offline dispute resolution clauses. However, difficulties may arise as ODR is just an electronic means or platform that parties choose, thus, parties might not always indicate a specific procedure, such as eNegotiation, eMediation, eArbitration or eCourt. If parties include a clause of arbitration through ODR, whether courts will enforce such an agreement to arbitrate is a crucial issue. Or if parties include a mediation clause, how can they seek enforcement afterwards? We will discuss the solutions as follows:

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[856] Kaufmann-Kohler & Schultz (2004), p.211.

a) Settlement agreements

A settlement agreement is a contract; it does not have the binding force of a judgment.[857] Thus, it must be enforced by bringing a contract action in court, obtaining a judgment, and possibly starting enforcement of judgment proceedings.[858] For example, mediation and non-binding arbitration outcomes are generally regarded as settlement agreements, whose main issue is the consequence on the ensuing court action of a failure to resort to such a clause.[859] The core issue here is how to ascertain the choice of court?

Article 5 of the Preliminary draft proposal for an EC Directive on certain aspects of mediation in civil and commercial matters provides that "member states shall ensure that, upon request of the parties, a settlement agreement reached as a result of a mediation can be confirmed in a judgment, decision, authentic instrument or any other form by a court or authority performing a public service that renders the agreement enforceable in a similar manner as a judgment under national law, provided that the agreement is not contrary to mandatory national law in the Member State where the request is made".[860]

The Hague Convention on Choice of Court Agreement is the litigation equivalent of the

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[857] *Ibid.*

[858] American Bar Association Task Force on E-Commerce and ADR, 'Addressing Disputes in Electronic Commerce', p.35-38.

[859] Kaufmann-Kohler & Schultz (2004), p.135.

[860] Preliminary draft proposal for a directive on certain aspects of mediation in civil and commercial matters, available at http://www.europarl.europa.eu/comparl/juri/consultations/ccbe_en.pdf (last visited on 2nd January 2007).

New York Convention because it seeks to provide an equal and viable alternative to arbitration.[861] From the United States perspective, though choice-of-court agreements are generally recognised at the federal level, but not clear at the state level, there is a need for an international convention on choice-of-court. For the EU, under its Article 26, the Choice of Court Convention will trump the Brussels Regulation when one party is resident outside of the EU, even if the court selected is within the EU. In this case, the Brussels Regulation "disconnects" and the Choice of Court Convention controls.[862] It is in favour of a court in both Member States and non-Member States.

The Choice of Court Convention aims to facilitate dispute resolutions and as such, it makes litigation a more viable alternative to arbitration because it ensures the enforcement of the forum selection clauses just like the New York Convention guarantees the enforcement of arbitration clauses.[863]

However, it is a long road to bring ODR settlement agreements in court. It is submitted that ways of simple enforcement should be strongly recommended. For example, if the settlement is reached in a cybercourt according to the discussion in Section 6.5.3, it will then constitute a judicial settlement, which is similar to the enforcement of judgments according to Article 58 of the Brussels I Regulation.

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[861] Trooboff (2005), 13.

[862] Teitz (Summer 2005), 543, p.556.

[863] *Ibid*, p.557.

Furthermore, the enforcement of ODR outcomes may be expressed as extra-judicial settlements in the form of authentic instruments[864] in accordance with Article 57(1) of the Brussels I Regulation, which states that: "a document which has been formally drawn up or registered as an authentic instrument and is enforceable in one Member State shall, in another Member State, be declared enforceable there". Article 57 (2) & (3) continues that "arrangements relating to maintenance obligations concluded with administrative authorities or authenticated by them shall also be regarded as authentic instruments. The instrument produced must satisfy the conditions necessary to establish its authenticity in the Member State of origin".

As discussed above, the enforcement of ODR as a form of authentic instrument requires three conditions to be fulfilled: that the instrument's authenticity is established by a public authority; that the authenticity is not only related to the signature but also to the content of the instrument; and, finally, that the instrument can be enforced in the state from which it originates. Out of court mediation settlement agreements, drafted instruments from a public notary and state-accredited mediation authority mediated settlements can all deemed to be authentic instruments.[865]

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[864] Kaufmann-Kohler & Schultz (2004), p.212.

[865] Cited from Kaufmann-Kohler & Schultz (2004), p.213.

A third solution may be that settlements take the form of consent awards.[866] It is suggested that the parties to a mediation "conditionally vest the mediator with the additional mantle of arbitrator, with the result that, if an agreement is reached, the mediator can render an arbitral award embodying the parties' agreement".[867] Alternatively, the parties to a mediation or negotiation insert into the settlement agreement an arbitration clause pursuant to which, in the event of non-performance of the settlement, an arbitrator shall have jurisdiction to turn the settlement into a consent award.[868]

b) Arbitral Awards

There are no uniform definitions of arbitration and arbitral awards in national laws and international instruments. Kaufmann-Kohler and Schultz conclude that "it is only of the parties intend a decision to be binding like a judgment that it constitutes an award and the process an arbitration".[869] So how can one recognise and enforce an arbitral award, particularly a foreign award?

This is the last but one of the most complicated obstacles. In most cases, the place of arbitration determines the nationality of an arbitral award. An arbitral award is deemed to be made at the place of arbitration and shall have the nationality of the country in which

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[866] Kaufmann-Kohler & Schultz (2004), p.214.

[867] American Bar Association Task Force on E-commerce and ADR, "Addressing Disputes in Electronic Commerce", p.37.

[868] Stipanowich (2001), 831, p.903, cited from Kaufmann-Kohler & Schultz (2004), p.215.

[869] Kaufmann-Kohler & Schultz (2004), p.157.

the place of arbitration is situated. Generally, the parties can choose the place of arbitration. When no choice has been expressed by the parties, the arbitrator will determine the place of arbitration. However, it is not absolutely necessary for the relevant matters of the arbitration proceedings to be actually conducted in the territory of the country at the place of arbitration, although the parties may have agreed on the place of arbitration. According to "the seat theory" which has been recognised and popularly adopted in the national arbitration laws and practices, the relevant matters of the arbitration procedures such as oral hearings and private deliberations of the arbitral tribunal over the case may be concluded in a country other than the place of arbitration, yet the place of arbitration remains unchanged, which is the place of arbitration agreed by the parties.[870] Under most national arbitration laws, arbitral awards are treated as the domestic awards of the nation where the awards are made. The enforcement of foreign awards is more complicated than that of domestic ones, and is generally regulated by international treaties. The current recognition and enforcement of foreign awards is mainly regulated by the 1958 New York Convention. The key issue is whether the online arbitral awards can be recognised and enforced under the New York Convention internationally. The biggest obstacle in international recognition and enforcement of online arbitral awards according to the New York Convention is whether the awards in digital form meet the requirements on the written form and originals of awards under the Convention, as well as how to solve the signature problem of such awards, because the New York Convention obliges contracting

[870] Hu (2005), p.7.

states to enforce an "agreement in writing" in which parties agree to arbitrate.[871] Before the international community admits that digital online arbitral awards meet the written form and original requirements of awards under the Convention, and clearly recognises the validity of digital signature by extensive interpretation of the Convention under the principle of functional equivalency, online arbitral awards may still be recognised and enforced internationally according to the New York Convention after being printed out and signed by arbitrators.[872] However, UNCITRAL currently is considering how to update the New York Convention (and the UNCITRAL Model Law on International Arbitration) to deal with electronic documents.[873] In addition, the word "contract" mentioned in the UN Convention on the Use of Electronic Communications in International Contracts is used in a broad way and covers, for example, arbitration agreements and other legally binding agreements whether or not they are usually called "contracts".[874] If so, digital arbitration agreements are automatically recognised under the UN Convention. Furthermore, Article 9(4) of the UN Convention provides a new rule for the electronic functional equivalent of an original document. The Working Group had initially included a provision on the electronic functional equivalent of an original in order to cover electronic arbitration agreements under the New York Convention ("the Convention on the Recognition and

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[871] Article II (1) of the 1958 New York Convention.

[872] Hu (2005), p.12.

[873] Drahozal (Fall 2006), 233, p.251, see also "Settlement of Commercial Disputes: Preparation of a Model Legislative Provision on Written Form for the Arbitration Agreement, Note by the Secretariat, U.N. Doc. A/CN.9/WG.II/WP.136, p.1-2 (July 19, 2005).

[874] Faria (2006), 689, p.690.

Enforcement of Foreign Arbitral Awards").[875] Article 20 of the UN Convention provides that "the provision of this Convention apply to the use of electronic communications in connection with the formation or performance of a contract to which any of the following international conventions, to which a Contracting State to this Convention is or may become a Contracting State, apply: 'Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York, 10 June 1958)'".[876]

c) Self-Enforcement Mechanisms

Self-enforcement is also called "self-execution". It generates the merits of ODR, low costs and convenience. Self-enforcement can be divided into two categories: one is direct self-enforcement, and the other is indirect self-enforcement.[877] Direct self-enforcement is identical to the ICANN UDRP domain name transfers, which consists in setting up mechanisms controlling the resources at play. However, in enforcing contractual dispute settlements, such kind of mechanisms can be payment system Escrow, refund system, transaction insurance system and technological constraints.[878] In indirect self-enforcement, incentives are created for the losing party to voluntarily comply. This can be trustmarks, reputation management system/rating systems, publicly accessible reports, exclusion of

[875] Wei & Suling (2006), 116, p.130.

[876] UN Convention on the Use of Electronic Communications in International Contracts, Article 20.

[877] Kaufmann-Kohler & Schultz (2004), p.224.

[878] *Ibid*, p.232.

participants from marketplaces, and payments for delay in performance.[879]

6.5.2 Jurisdiction and choice of Law Clause

So if ODR providers breach service agreements with disputing parties, for example, when disclosing confidential information, which court will have jurisdiction? For example, if disputing Party A is from England, disputing Party B from China, and the ODR provider from California, USA.

Generally, most of the ODR service agreements have a jurisdiction clause, but if there is no such a clause, how can one determine it?

In my opinion, party autonomy should be applied to ODR service agreements. Parties should be free to choose jurisdiction in ODR service contracts. In the case that parties fail to have a jurisdiction clause, it is suggested that the location should be the place of ODR providers' business, in accordance with Article 6 of the United Nations Convention on the Use of Electronic Communications in International Contracts, which states that "the place of business is that which has the closest relationship to the relevant contract". It is sensible that the place of ODR service providers should have the closest relationship to the service agreements. However, Article 6 of the UN Convention further indicates that the location will not necessarily be the place of business merely because (a) the equipment and

[879] *Ibid*, p.225-227.

technology are located; and (b) if the information system may be accessed by other parties. Thus, the place of ODR service providers should be the place where ODR services are registered, but not merely where the equipment and technology are located.

As to the choice of law, party autonomy is a core principle. In the absence of substantive international ODR regulation, parties still need to make choice between the possible alternatives, such as UNCITRAL Model Law on Electronic Commerce, UNCITRAL Model Law on Electronic Signatures, UN Convention on the Use of Electronic Communications of International Contracts, UNCITRAL Model Law on International Commercial Arbitration, New York Convention, or other national laws. As to online arbitration, in most countries, the law governing arbitration is the law of the place or seat of arbitration. Hence, determining the applicable law requires determining the place of arbitration.[880]

6.5.3 Model of Codes of Conduct

The model of codes of conduct should suggest principles for managing online dispute resolutions, not only with policies but also methodologies and technologies. The proposed model of codes of conduct for handling online disputes would be:

[880] *Ibid*, p.166.

1) General Provisions

This includes procedure or formalisation and control mechanisms of ODR. It covers ODR principles and its accreditation scheme, such as clearing house[881] or appellate bodies, as well as ODR trustmark scheme.

2) Specific Provisions

This provision contains specific rules regulating cybercourts, including online jury proceedings and commitments to technology.

3) Enforcement Mechanism

Under this provision is the enforcement of ODR settlement agreements, including self-enforcement and enforcement in courts.

6.6 Conclusion and Recommendation

From the above discussion of the current developments of ODR in the EU, US and China, it is clear that the stage has been reached where it is necessary to establish a uniform code of conduct at the international level. With the development of a global virtual world and the increasing popularity of electronic transactions, there is no doubt that in the not so far

[881] "The network can play the role of a "clearing house". Such role entails examination of the matter in dispute in order to choose the appropriate or most appropriate ODR provider for the type of dispute considered. The function of a clearing house would be liaising with the users and the ODR providers throughout the whole process." By Philippe (2002).

future, ODR will handle a large part of the disputes.

In order for ODR to meet effectively the needs and goals of the online community, the following main concerns require further research, practice and clarification:

1) the adoption of recognised and enforceable international or cross-border quality standards for ODR service providers;[882]

2) the examination and amendment of current ethical codes for the applicability to ODR;[883]

3) the determination of appropriate enforcement mechanisms for ODR outcomes;[884]

4) the further education and awareness raising of online businesses and the public about ODR processes;[885]

5) the experimentation and employment of efficient and secured ODR technologies;

6) the establishment of trusted third parties to supervise and guarantee the order of ODR

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[882] Ponte & Cavenagh (2005), p.144.

[883] *Ibid*, p.146.

[884] *Ibid*.

[885] *Ibid*.

business services.

In short, trust is the most important element to bolster e-business confidence in both e-transactions and e-dispute resolutions. In this chapter, we have investigated how to provide a safe online dispute resolution environment. I hope and believe that this chapter, through the understanding and analysis of the definition, practical relations of parties, technology and legal concerns of ODR mechanism, reveals some potential research trends. At the same time, by examining the ODR legal frontier in different countries, it provides a general concept of ODR legislation at the international level and contributes to fundamental ideas on e-confidence in general.

7. Chapter Seven

Conclusion

7.1 Legislation

As discussed in the above chapters, the ever-increasing number of IT participants has driven to an explosion of electronic commerce. Buying and selling online has become a common practice without regard to physical boundaries. However, electronic commercial transactions are dramatically developing, alongside with newly emerging legal challenges.

From a legal perspective, electronic commercial transactions are within the scope of traditional commercial law and international trade law, covering a wide range of legal issues. A noticeable difference from traditional commercial transactions, which are usually carried out face-to-face, is that the majority of transnational electronic transactions involves people that will never physically meet. This changes the essence of trade law in many ways. However, similar to the traditional trade law, contract law, jurisdiction, choice of law, security and dispute resolution are key aspects in electronic commerce as well. This thesis targeted these subject matters, discussed them and proposed solutions to overcome obstacles in electronic commercial transactions.

It is argued that electronic commerce does not add new insights into the operation of traditional laws, such as contract law, instead, it adds a new different layer of communication by electronic means, and thus a new body of laws governing issues in

electronic commercial transactions would not need to be established.[886] The EU, US and international organisations, like UNCITRAL, have considered these matters. The Secretary of UNCITRAL, Mr. Jernej Sekolec, for example, recently expressed the view that there should not be a new set of electronic commerce laws governing international trade,[887] as it would cause confusion and complicate the law unnecessarily.

In my opinion, it is understandable that it would cause confusion if there were two sets of national and international trade laws, one for offline and the other for online. It is normal to doubt the practicality of such an approach. But fear of facilitating different sets of laws should not become an obstacle to modernising existing laws to adapt to the future development of various high technologies in electronic commercial transactions. From the research in this thesis, there is strong evidence showing that electronic commercial transactions do have their unique characteristics. The entire concept of electronic transactions is the same as the traditional ones, but the actual conduct of electronic transactions is fundamentally different.

It is certain that electronic transactions can be deemed to be means of communication from a technological point of view. However, the legal perspective of the operation of electronic

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[886] Dalhuisen (2007), p.254.

[887] *Distinguished Lecture: General Problems of Transnational Law and its Implications for the companies and International Trade*, by Jernej Sekolec, Secretary of the UNCITRAL, 17 September 2007, IP 2007, Faculty of Law, University of Deusto, Bilbao (Spain), 17-26 September 2007.

transactions should not be ignored. The two dominant factors that could distinguish the legal consequences of electronic transactions from traditional ones are the determination of "time and place of dispatch and receipt of an electronic communication",[888] and "the place of business"[889] in cyberspace. When involving digitised goods with delivery online, these two factors, as explained in the thesis, would lead to different outcomes in relation to ascertaining the rules of electronic offer and acceptance, jurisdiction and applicable law. Traditional contract law and private international law will not be sufficient to govern these issues.

Furthermore, in my opinion, electronic commerce law has a similar function to traditional commercial law: to encourage transnational trade. Commercial laws are essential for long-term investments.[890] Companies, which engage in long-term transactions, will be able to prosper because there are legal mechanisms available to enforce non-performed arrangements. [891] Thus, an established electronic commerce legal regime would undoubtedly encourage long-term electronic trading.

However, another view of mine is that before drafting completely new electronic

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[888] Article 10 of the UN Convention on the Use of Electronic Communications in International Contracts.

[889] Article 6 of the UN Convention.

[890] *Distinguished Lecture: General Problems of Transnational Law and its Implications for the companies and International Trade*, by Jernej Sekolec, Secretary of the UNCITRAL, 17 September 2007, IP 2007, Faculty of Law, University of Deusto, Bilbao (Spain), 17-26 September 2007.

[891] *Ibid.*

commerce laws, careful consideration should be given to existing laws. Scholars, legislators and practitioners should work closely together to examine whether existing laws can apply to electronic commercial transactions. If the answer is yes, a new explanatory note should be included referring to electronic commerce. If the answer is no, then two options are available: to insert new provisions of electronic commerce into existing laws or to create new sets of electronic commerce laws.

As examined in the thesis, issues regarding electronic contract, jurisdiction and choice of law do not require separate laws as the existing laws can apply to them partially. However, since they are largely insufficient, it is necessary to amend or modernise the existing laws by incorporating new provisions of electronic commerce. On the other hand, issues concerning electronic signature and authentication, as well as the conduct of online dispute resolution need to be regulated separately in new sets of laws, because, although requirements of signature as well as rules of litigation, arbitration, mediation and negotiation can remain the same as the offline legislation, using electronic means creates new concepts and raises new issues in these legal areas. Therefore, it is necessary to establish new laws.

As we can see from the analysis in the previous chapters, the EU, US and International organisations have made efforts to remove legal barriers to electronic commerce. The EU directives, US uniform laws, Chinese national laws and the UNCITRAL model laws and

the UN convention covering issues of electronic commence, electronic contracting and electronic signatures, do not establish substantive rules but give general principles to boost confidence for doing business online. However, some obstacles to electronic commercial transactions remain unresolved.

7.2 Solutions to Obstacles

The thesis proposes solutions to the eight main legal obstacles to electronic commercial transactions as highlighted in Chapter One.

The first solution relates to the lack of trust in online business transactions. Building trust in e-business not only requires the availability and knowledge of advanced information technology but also legal protection and the possibility of dispute resolutions. Thus, from a legal perspective, the legal regime of B2B electronic commercial transactions must include rules relating to contract law, private international law and dispute resolution.

The second solution concerns the determination of electronic offer and acceptance in electronic contracts. After examining the characteristics of electronic communications, including email contracting and click-wrap agreement, I concluded that a contract formed by electronic means is similar to a contract made by telephone or facsimile as they are all instantaneous. Although dispatching an email is like dropping a letter in a red post box, email communication is still much quicker than traditional post. Electronic mail overcomes

the disadvantages of the postal mail as it is possible to determine the time of dispatch and receipt of electronic communications, providing evidential certainty to the receipt of an offer and acceptance. Therefore, the postal rule loses its purpose in electronic communications. Where an offer and acceptance are to be communicated by electronic means, a contract should be concluded upon receipt of the acceptance by the offeror. My proposal is that the acceptance rule should prevail over the postal rule in electronic offer and acceptance. Hence, the acceptance should be effective when it is received.

The third solution refers to the availability of contract terms, errors in electronic communications and battle of forms. In relation to the availability of contract terms, most current e-commerce legislation does not require such a duty. In my view, it is necessary for model laws, directives or conventions to impose a duty of making contract terms available or reproducible online, because it is crucial to have evidence when disputes arise. With regards to errors in electronic communications, technologies enabling the amendment in error inputs and the withdrawal of error communications must be available on the website, because in instantaneous and automated communications, negligence can appear easily and unintentionally. For example, pressing the wrong button on the Internet can create serious legal consequences. Referring to battle of forms, the combination of the ruling in the UCC, CISG, PICC and PECL can apply to online battle of forms, that is, electronic acceptance, which contains additions, limitations or other modifications, is a rejection of the offer and constitutes a counter-offer. However, if the additional or different terms in the general

conditions of the acceptance do not materially alter the offer, they should form part of the contract to the extent that they are common in substance, or otherwise parties agree.

The fourth solution focuses on the issue of ascertaining jurisdiction in electronic contracts. There are different rules of jurisdiction in the EU, US and China. The EU applies general and special jurisdiction according to the Brussels I Regulation, whilst the US Courts, following the *International Shoe* case, focus on whether a defendant's activities constitute "minimum contacts" with a forum state, as well as applying the Sliding Scale from the *Zippo* case which distinguishes between three broad categories of websites based on their interactive and commercial characteristics. Chinese law is different from the EU and US as it does not address provisions of general and special jurisdiction separately. However, Chinese law, just like in the EU and the US favours the two factors, domicile and the place of performance, to determine jurisdiction. The thesis concludes that for disputes involving contracts of tangible or digitised goods with physical delivery, rules of Internet jurisdiction are the same as the rules of offline jurisdiction, as the place of performance has a physical location in both. However, for disputes involving contracts of digitised goods with delivery online, the rule concerning the place of performance online must be specifically examined. In my view, in this case, the place of performance should be the recipient's place of business indicated by the party. If the party fails to indicate the place of business or has more than one place of business, the place of business should be the one with the closest relationship to the relevant contract or where the principal place of business is situated.

The closest connecting factor should be the place of receipt of an electronic communication.

The fifth solution refers to determining the applicable law in electronic contracts. The EU, US and China distinguish the applicable law in cases of choice and in absence of choice by parties. As a general rule, parties are free to choose the governing law. Otherwise, the contract will be governed by the law of the country with which the contract is most closely connected or has the most significant relationship to the transaction in cases of absence of express choice. Just like for the determination of Internet jurisdiction, tangible or digitised goods transacted online with physical delivery do follow the same rules for the determination of the applicable law as in the offline world. The difference arises with contracts involving digitised goods with delivery online. According to the findings in the thesis, in this case, the seller's place of business is the most enduring connecting factor, which has an economic impact on its area. Thus, the law of the seller's place of business should be the law governing B2B electronic contracts in the absence of a choice of law clause.

The sixth solution focuses on the removal of barriers to the recognition of electronic signature and international certificates of electronic authentication. Electronic signature is essential because it identifies the contracting parties, secures the electronic transactions and indicates recognition and approval of the contents of a document. In all the existing

electronic signature laws, electronic signature has been recognised as equivalent to handwritten signatures. Certificate Authorities (CAs), trusted third parties, can be licensed or unlicensed, public or private. The industry of CAs has not developed as expected since the 1990s because private sectors are reluctant to establish CAs due to the uncertainty of their legal liability. There are no substantive rules governing the standard of an electronic signature and the recognition of foreign certificates of authentication. In my view, the establishment of a model law regulating the conduct of international certificate authorities is necessary, because electronic commercial transactions are often transnational and there is a high risk of dealing with fraud certificates from a third country. Furthermore, parties using foreign certificates will have no certainty of legal protection because national laws are different.

The seventh solution aims to clarify the mechanism of online dispute resolution (ODR) referring to electronic contracting disputes. ODR is a new solution to build trust in electronic commercial transactions. Three successful examples, WIPO–UDRP, eBay–SquareTrade and AAA–Cybersettle, have been examined in the thesis, proving that the linking of ODR service providers and primary market makers, as well as the self-enforcement mechanism of resolution outcomes, are key credentials to their success. The conduct of ODR should include six core principles: accountability, confidentiality, accessibility, credibility, security and enforceability.

The eighth solution is concerned with the enforceability of the decisions of online dispute resolution. Enforceability, one of the six core principles of the conduct of ODR, is essential, since its success will encourage electronic traders or businesses to use ODR to resolve their disputes. The outcomes of online mediation and negotiation should be able to convert into settlement agreements, whilst the decisions of online arbitration should constitute arbitral awards. Otherwise, the ODR service providers should have their self-enforcement or self-execution mechanisms to enforce contractual dispute settlements.

Overall, during the pre-Internet era, companies traded with foreign companies even though their legal systems were different. The absence of unified laws did not prevent them from conducting effective cross-border businesses. Therefore, unifying electronic commerce laws should not be regarded as a significant legal doctrine, instead, modernising, harmonising or facilitating electronic commercial law should be considered as an important approach. This idea is also now favoured by UNCITRAL.[892]

[892] *Distinguished Lecture: General Problems of Transnational Law and its Implications for the companies and International Trade*, by Jernej Sekolec, Secretary of the UNCITRAL, 17 September 2007, IP 2007, Faculty of Law, University of Deusto, Bilbao (Spain), 17-26 September 2007.

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Appendix A

Electronic Commercial Transactions Legislation

	EU	**US**	China	**Int'l (UNCITRAL)**
Electronic Commerce Law	EC Directive on Electronic Commerce.	Uniform Computer Information Transactions Act & Uniform Electronic Transactions Act.	N/A	UNCITRAL Model Law on Electronic Commerce.
Electronic Contracting Law	*N/A*	N/A	N/A	UN Convention on the Use of Electronic Communication in International Contracts.
Electronic Signatures Law	EC Directive on Electronic Signatures.	Electronic Signatures in Global and National Commerce Act.	The People's Republic of China on Electronic Signatures.	UNCITRAL Model Law on Electronic Signatures.
Private International Law regarding Electronic Transactions	Rome I Convention & Brussels I Regulation.	Case Studies	Civil Law & Criminal Law of the People's Republic of China.	N/A

APPENDIX B: Comparative Table: Global Electronic Commerce Legislations

	UN Con. E-Con.	UNC. E-Com.	UNC. E-Sign.	EU Dir. E-Com.	EU Dir. E-Sign.	UCITA	UETA	E-Sign Act	Chinese E-Sign
Party Autonomy	Art. 3					Sec. 107(c)	Sec. 5		
Location of Parties	Art. 6					Sec. 109(d)			
Legal Recognition of E-Communications	Art. 8	Art. 5	Art. 3		Art. 5	Sec.107(a)	Sec. 7	Sec. 101	Art. 3
Legal Effects of E-Signatures		Art. 7	Art. 6				Sec. 9		Art. 13
Treatment of Contracts	Art.8, 11, 12 & 13			Art. 9					
Form Requirements	Art. 9	Art. 11		Art. 9(1)		Sec. 202			
Time and Place of Dispatch and Receipt of E-Communications	Art. 10	Art. 15		Art. 11		Sec. 214	Sec. 15		
Validity of Electronic Message						Sec. 214			
Invitation to Offers	Art. 11								
Availability of Contract Terms	Art. 13					Sec. 113			

	UN Con. E-Con.	**UNC. E-Com.**	**UNC. E-Sign.**	**EU Dir. E-Com.**	**EU Dir. E-Sign.**	**UCITA**	**UETA**	**E-Sign Act**	**PRC E-Sign**
Use of Automated Message System for Contract Formation	Art. 12					Sec. 102 (a)(7)	Sec. 14		
Errors in E-Communications	Art. 14						Sec. 10		
Legal Liabilities		Art. 12-15	Art. 8, 9 & 11		Art. 6				Art. 17-24 & 27-33
Offer and Acceptance						Sec. 203			
Battle of Forms						Sec. 205			
Electronic Agents	Art.12					Sec.107, 112 &206	Sec. 14(1)		
Recognition of Foreign Certificates and Electronic Signatures			Art.12						
Out of Court Dispute Settlement				Art. 17		Sec.110			
Choice of Law						Sec. 109			
Enforcement						Sec. 111			