

Chapter I

Introduction

1. Research Objectives

Indonesia, officially known as The Republic of Indonesia, is one of the ASEAN Free Trade Area members of Southeast Asia. It comprises 17,504 islands and 33 provinces. Indonesia is also the world's fourth most populous country and has the world's largest population of Muslims. According to the Central Statistics Agency, Indonesia's population was 237.6 million in 2010 (an increase of 32.5 million from the population census in 2000) and its annual growth rate has averaged 1.49 per cent over the past few years.¹⁾ As a leading country with over 500 million population and a member of the ASEAN Free Trade Area, Indonesia holds its position as a developing country trying actively to diversify in trading with other members of ASEAN FTA, also including USA, EU, Korea, Taiwan, etc and investments related to area foreign transaction.

Indonesia also known as a country rich in natural resources likes petroleum, tin, natural gas, nickel, timber, bauxite, fertile soil, coal, gold, and silver with a division of land consisting of 10 percent agricultural land, 7 percent oil, 7 percent grass land, forests and wooded areas make up 62 percent, and another 14 percent in the irrigated area with a width of 45,970 kilometers.²⁾ From an economic perspective it shows that Indonesia has a huge market potential for other countries. Indonesia has a wealth of

1) 「http://www.bps.go.id/65tahun/Boklet_Agustus_2010.pdf」 (hereinafter for all the URL sources are displayed on 2012.03.30. Furthermore hereinafter the protocol (http://) will be omitted).

2) 「www.wikipedia.org」.

natural resources that is quite complete from other ASEAN countries.

As it is known, when the economic and financial crisis hit Indonesia in 1997, Indonesia has to face a serious monetary crisis and there was a negative prediction that it would be difficult to recover with that social and political structure. But based on its rich natural resources and labor's infrastructure, after the year 2000 it showed in the record that there's an improvement in the rate of economic growth continuously around 5% or more until now where it has finally succeeded back to the normal track of development. Despite the impact after the monetary crisis, on the year 2008 the Indonesian economy still grew as showed in index record that the rate of growth was still 6.1%. Meanwhile, at the end of 2010, according to Indonesia's real economic forecast, the economic growth rate will reach 6.5 percent or more. Furthermore, after 2008 until now, the number of Indonesia's foreign direct investment(FDI) increased more than 1000 annually. For example, in 2010 a third quarter of investment was foreign investment in flows which exceeded \$13 billion. Indonesia is the 4th most populous nation in the world. Apart from its remarkable fiscal and political transformations during the last decade, Indonesia is also undergoing a major structural shift in terms of demographics and has a wealth of natural resources and economic strength of labor. It has been predicted that with the possibility of natural resources and economic strength from labor's potential growth is high. Out of the 237.6 million people, over 50% of the population is under 29 years old, with this same percentage of young people living in urban areas.³⁾ This provides for dynamic labor market participation, growing at 2.3 million per year. A rapidly urbanizing population also provides for strategic pools of labor force in terms of

3) Shim, Chong-Seok, "A Legal Study on The Law of Electronic Information and Transactions in Indonesia: Focused on The Definitions and General Provision", *Internet e-Commerce Research*, Korea Internet e-Commerce Association, Vol. 10, No. 4, 2010, p.4.

investment.

In short, Standard Chartered sees the Indonesia's inclusion in G~7 by 2040 and estimate that Indonesia's economic growth achieve potential by 2012, moving the economy ahead of South Korea by 2016, it will level up with Japan by 2024,⁴⁾ and Indonesia's economy will catch up with United Kingdom by 2044 and Germany by 2047⁵⁾. Indonesia's economy grew by 6.1% in 2010 and at the same time, according to the BRICs the economic indicators show that after 2011, Indonesia's real economy of scale growth rate will accelerate around more than 6% and in 2012 is forecast to climb to 6.5%~7%, providing a case for Indonesia's inclusion in the so called BRIC economies.⁶⁾

Meanwhile, based on the Indonesia domestic manufacturing centers developed road map of Chamber of Commerce in Indonesia(Kamar Dagang dan Industri: KADIN), shows that Indonesia's economic market until 2015 will be in food, petroleum, electronics, accessories, raw materials, transmission equipment, such as the central pillar of the automotive industry. But in fact, amongst the industries, the excellent field is communication and information equipment industry. According to market research, mobile communication users in Indonesia have reached an estimated 65% by the end of 2010 of the whole population.⁷⁾

In this writing, pertaining to Indonesia's support of the industry trend of rapid development of Indonesia's first electronic communications industry and infrastructure related areas, especially in the legal system from an

4) 「www.indonesia.sk」.

5) Hawksworth, John. Tiwari, Anmol., "The World in 2050: The accelerating shift of global economic power: challenges and opportunities", *Pricewaterhouse Coopers Report*, 2011.01, p.16.

6) Djajusman, Darmawan., "Investment Policy and Opportunities in Indonesia", *Indonesia Investment Coordinating Board of Republic Indonesia*, 2011.09, p.12.

7) 「www.researchandmarkets.com」.

infrastructure point of view analysis of the status of their legislation.

From the government's point of view, compared with other developed countries, the infrastructure of Indonesia's electronic information industry is relatively weak, but as with AFTA, the greatest economies of scale in the country, from its efforts to improve the legal environment in this area, you can determine the outcome of their legislation is being constantly improved. In this paper, the current Indonesian law on e-commerce acts as the main system, that is, 'Electronic Information Transactions Act'(The Law of Electronic Information & Transaction, the following abbreviated as 'LEIT') as the center and its legal significance, characteristics, advantages and disadvantages will be analyzed.

From this research would like to draw the conclusion and implication: Firstly, through Indonesia LEIT comparative analyze, would like to draw the problem and improvement related to Korean legal system. Secondly, it would like to shows the strength points and weakness points also the implication related to LEIT and Framework Act on Electronic Commerce(hereinafter as 'FAEC') in legislation line. Thirdly, from the result of this research, it could be use as a reference for Korea and Indonesia to improve their own e-commerce law in legislative and practice side.

2. Methodology Research

The analysis tool that is used to achieve the object of research in this thesis is a comparative analysis which is the comparison of LEIT with FAEC including UN Convention on the Use of Electronic Communications in International Contracts,⁸⁾ Model Law on Electronic Commerce,⁹⁾ the U.S. Uniform Electronic Transactions Act,¹⁰⁾ Uniform Computer Information

8) 「www.uncitral.org/pdf/english/texts/electcom/06-57452_Ebook.pdf」 .

9) 「www.uncitral.org/pdf/english/texts/electcom/05-89450_Ebook.pdf」 .

Transactions Act¹¹⁾ and other comparative analysis.

The law and regulations in above is encompassing model law and general principle is also used as an analysis tool to get the result of this research.

10) 「www.law.upenn.edu/bll/archives/ulc/ecom/ueta_final.pdf」 .

11) 「www.nccusl.org/nccusl/ucita/UCITA_Summary.pdf」 .

Chapter II

The Concept of Electronic Commerce and Its Legislative Cases

1. General Concepts

1) Definition of Electronic Commerce

The meaning of electronic commerce(hereinafter 'EC') has changed over the last 30 years. Basically, the meaning of EC¹²⁾¹³⁾ is the facilitation of commercial transactions electronically, by using technology such as 'electronic data interchange'(EDI)¹⁴⁾¹⁵⁾ and 'electronic funds transfer'(EFT).

EDI and EFT were appeared in the late 1970s and widespread use in the 1980s which allowing the companies in doing businesses by send commercial documents electronically like purchase orders or invoices and gave an opportunity for users to exchange business information and do electronic transactions. EC became possible to apply in 1991 when the

12) EC, in a broad sense, is the use of computer networks to improve organizational performance. Increasing profitability, gaining market share, improving customer service, and delivering products faster are some of the organizational performance gains possible with electronic commerce. Electronic commerce is more than ordering goods from an on-line catalog. It involves all aspects of an organization's electronic interactions with its stakeholders, the people who determine the future of the organization.

13) Watson, Richard T., *et al.*, "Electronic Commerce: The Strategic Perspective", *Creative Common Attribution 3.0 License* 2008, p.8.

14) EDI is the electronic transfer of a standardized business transaction between a sender and receiver computer, over some kind of private network or value added network (VAN).

15) Lee, Mrkonjic., "What is EDI and How does it Work?", *B2B Series Whitepaper*, 2009, p.4.

Internet was opened to commercial use. EC is related to services through a computer-mediated network and usually associated buying and selling transaction through internet. EC is paperless and borderless transactions. People do not need to meet face to face, it's a non face business.

Though popular, this definition is not comprehensive enough to capture the recent developments in this new and revolutionary business phenomenon. A more complete definition of EC is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals.¹⁶⁾

There are a different types of e-commerce are: business-to-business (B2B); business to consumer(B2C), business-to-government(B2G), consumer to consumer(C2C) and mobile commerce(m-commerce).

There are many ways to define EC. Below is the definition from several sources: "EC is about doing business electronically. It is based on the electronic processing and transmission of data, including text, sound and video. It encompasses many diverse activities including electronic trading of goods and services, on-line delivery of digital content, electronic fund transfers, electronic share trading, electronic bills of lading, commercial auctions, collaborative design and engineering, on-line sourcing, public procurement, direct consumer marketing and after-sales service. It involves both products(e.g. consumer goods, specialized medical equipment) and services(e.g. information services, financial and legal services), traditional activities(e.g. healthcare, education) and new activities(e.g. virtual malls)."(European Commission, 1997).¹⁷⁾

16) Andam, Z. R., "E-Commerce and E-Business", *e-ASEAN Task Force UNDP-APDIP*, 2002, pp.6~10.

“EC is the carrying out of business activities that lead to an exchange of value across telecommunications networks.”(EITO, 1997).

As defined by Organization for Economic Co-operation and Development(OECD), “Electronic commerce refers generally to all forms of transactions relating to commercial activities, including both organizations and individuals that are based upon the processing and transmission of digitized data, including text, sound and visual images.”¹⁸⁾

In Skevington’s journal it defines the most useful way of describing e-commerce is to use it to link it to trading, as following: “EC is trading by means of new communication technology. It includes all aspects of trading, including commercial market making, ordering, supply chain management, and the transfer of money.”¹⁹⁾ ‘New communication technology’ defines that everything beyond of telephone voice, fax and telex. It is the new technologies of the internet, together with the tremendous advances in IT generally, that have enabled revolutionary changes in the way of trading e-commerce.

From the EC definition of several sources, it can be concluded that all the definition has the same definition point that ‘EC’ is doing business electronically which all of them is involving using data message.

2) Comparison of Electronic Commerce and Electronic Transactions

There are several definitions related to EC as following: (a) EC is a transaction do in electronically way, where the key point is based on the

17) European Commission, A European Initiative in Electronic Commerce, 1997, 「www.cordis.lu」 .

18) OECD Policy Brief No. 1 on Electronic Commerce Organization for Economic Cooperation and Development, 1997, 「www.oecd.org」 .

19) Garret, S.G.E. Skevington, P., “An Introduction to eCommerce”, *Journal of BT Technology*, Vol. 17, NO. 3, 1999, pp.11~16.

electronic processing data include text, sound, video and transmission. Thus, the electronic commerce with this background is include the various of activity of goods and electronic transaction domain, online delivery that has occur in digital form, fund transfer in electronic way, electronic Bill of Lading, commercial auction, collaboration design and engineering, online provider, information procurement, direct marketing consumer and ex post facto guarantee.²⁰⁾ (b) EC is where business transactions take place via telecommunications networks, especially the Internet. (c) EC is about doing business electronically.²¹⁾ (d) EC is defined as the conduct of a financial transaction by electronic means.²²⁾

In the other hand, for the transaction definition, 'transaction' can be defined broadly as "an action or set of actions relating to the conduct business, consumer, or commercial affairs between two person or more persons."²³⁾

Based on OECD, 'Electronic Transactions' is the sale or purchase of goods or services, whether between businesses, households, individuals, governments, and other public or private organizations, conducted over computer mediated networks.²⁴⁾

In the other hand, commerce is defined as the exchange of goods and services, esp. on a large scale involving transportation between cities, states and nations.²⁵⁾ EC is include the electronic medium forex change of merchandise if is saw for association perspective. Hence, the EC can be

20) Shim, Chong-Seok, *op cit.*, pp.350~351.

21) P. Timmers, *Electronic Commerce Strategies and Models for Business-to-Business Trading*, John Wiley & Sons, 2000, p.4.

22) 「www.straight-on.com」.

23) see, 15 U.S.C.A § 7006 (13).

24) 「www.stats.oecd.org」.

25) A.Garner, Bryan., *Black's Law Dictionary*, West Thomson Reuters Business, Ninth Edition, 2009, p.45.

defined broadly as the exchange of merchandise(whether tangible or intangible on a large scale between different countries through internet as electronic medium.

With the comparison of EC and electronic transaction, it can see the differentiation in scope clearly. EC can figure out with commercial activity of commercial law in relation to the chain of electronic activity in the comprehensive scope of electronic transaction. The fact of electronic transaction is mostly in development domain of B to B business transaction and also electronic transaction is not only based on this but also the standard terminology of transaction's definition is involving the duty of the main agent parties.²⁶⁾ So, it can conclude that in electronic transaction it not only involving commercial activity purpose but also the other purposes.²⁷⁾ The scope of EC is for commercial activity and this scope is inside the electronic transaction scope. Thus, the scope of electronic transaction is broader and comprehensive than EC.

3) The Function of Electronic Document and Requirement

(1) The Function of Electronic Document

Basically electronic document has a same definition with paper document in readability, value and accelerating ability. Electronic documents or electronic record can provide the same level of security as the paper-based function such as providing a readable document, make sure that a document is unchanged, allow for the reproduction of documents so that

26) Oh, Won Seok., *et.al.*, *The Internet Trade Theory*, Law Literature, 2000, p.7.

27) Oh, Hyon-Sok, "A Study on Some Problems of The Electronic Certification in International Electronic Commerce", *Master Program Thesis*, The Graduate School of Sung Kyun Kwan University, South Korea, 2003.

the parties can have a copy of same data, allow for data authentication by means of a signature and the electronic document also acceptable in public authorities and courts. Electronic document is made through computer as a tool for declaration of intention.

In Art. 5 sets out the fundamental principle of the MLEC that electronic communications should not be discriminated against or denied legal effect simply because they are in electronic form. Art. 6 establishes the basic standard to be met by an electronic document when there is a legal requirement for a document when there is a legal requirement for a document to be in writing, it provides that a legal requirement to present information in writing will be met by providing an electronic document if information contained in the document is “accessible so as to be usable for subsequent reference.”²⁸⁾

Art. 7 of MLEC acknowledges that in a paper-based environment, the role of a signature is to indicate approval of a document’s contents and to verify the document’s authenticity. This Article provides that a requirement for a person’s signature will be met in the case of an electronic document if a reliable method is used to identify the person and to indicate the person’s approval of the information contained in the document.²⁹⁾

There are another important function that accomplish by a paper based document is to satisfy a legal requirement for an original document. In Art. 9 of the MLEC explain that MLEC deals with the admissibility of electronic documents in legal proceedings.

In the FAEC also stated in Art. 4, (1), it explains that an “electronic document shall not be denied its validity only because it takes an electronic form, except as otherwise provided for in any other Acts(FAEC,

28) Davies, Alysia, “The Development of Laws on Electronic Documents and E-Commerce Transactions”, *Parliamentary Information and Research Service*, 2008, p.3.

29) D. Alysia., *ibid*, p.3.

Art. 4, (1)).” From above in Art. 4, (1) it showed that the electronic document has the same recognition in legal side with the paper-based document.

(2) The Electronic Document’s Requirement

As stated in MLEC, electronic document require the information to be in writing, that requirement is met by a data message if the information contained therein is accessible so as to be usable for subsequent reference and applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for the information not being in writing(MLEC, Art. 6).

In MLEC art 10 state that the retention of data message has to meet the requirement and condition that stated in art 10 where the information contained therein is accessible so as to be usable for subsequent reference(MLEC, Art. 10).

Electronic document is valid when it meet the required condition for recording, document be signed, requirement is fulfill the electronic signature and the document or signature associated with a notarization, acknowledge, verified, witnessed and all information are included in the requirement.

In FAEC, Art. 4, (2) mention that where any activity to record, report, deposit; keep or prepare, etc under the provisions of Acts as provided for the attached table has been made by electronic documents, it shall be deemed that activities under the relevant acts have been conducted(FAEC, Art. 4, (1)). The Art. 4, (2) explain that the electronic document have to use the table as provided in this acts. And also electronic document have to fulfill the requirement as stated in Art. 5.³⁰⁾

30) FAEC, Art. 5 (Custody of Electronic Documents): (1) In cases where electronic documents meet the following requirements, the custody of such electronic

2. Legislative Cases Related to EC

1) Leading Countries

(1) United States

In the United States, in order to provide some legal certainty or also known as US Federal Acts. There are several legislation that in relation to

documents may take the place of the custody of documents prescribed by the relevant Acts and subordinate statutes: 1.Details of electronic documents shall be offered for public perusal; 2.Electronic documents shall be preserved in the form when prepared, transmitted or received, or in the form reproducible same as such; 3. In cases where matters concerning an originator, an addressee and the time of transmission or receipt of electronic documents are included therein, such parts shall be preserved. (2) In cases where documents converted to a form that may be processed by the information processing system (hereinafter referred to as 'electronic documents') from paper documents or other documents not prepared in the electronic form (hereinafter referred to as "documents subject to conversion to electronic documents") meet the following requirements, the custody of such electronic documents may take the place of the custody of documents prescribed by the relevant Act and subordinate statutes: Provided, That the same shall not apply to a case where special provisions exist in other Acts and subordinate statutes: <Newly Inserted by Act No. 8461, May1Z 2007> 1.Details and form of lectronic documents shall be identical to those of documents subject to conversion to electronic documents; and 2.Electronic documents shall meet each requirement set out in the sub paragraphs of paragraph(1). (3) Requirements for identity of details and form of electronic documents and documents subject to conversion to electronic documents underparagraph (2), method of and procedure for preparation of electronic documents and other necessary matters shall be determined and publicly announced by the Minister of Knowledge Economy. <Newly Inserted by Ac tNo. 8461, May 17, 2007; Act No. 8852, Feb. 29, 2008> (4) In the application of paragraphs (1) and (2), parts only necessary for transmission or receipt may not bedeemed to be electronic documents or documents converted to electronic documents. <Amended by Act No. 8461, May 17, 2008>

the electronic commerce. Those legislation are the Electronic Signatures in Global and National Commerce Act' 2000(E-Sign), UCITA and UETA. The general explanation in relation to the legislation is as following:

(i) UETA

The first law that was adopted by more than 22 states was the Uniform Electronic Transactions Act(UETA), which was developed by the National Conference of Commissioners of Uniform State Laws in 1999(Kuetchler & Grupe, 2003). The UETA is to provide the uniform rules to govern the electronic commerce transactions.

The State of California enacted the UETA on September 16, 1999 under the 1999 California Senate Bill 820. California's version differs from the National Conference of Commissioners on Uniform State Law's(NCCUSL) UETA by adding provisions under the 'use of electronic records and electronic signatures' section, the 'notarization and acknowledgment' section, as well as the 'time and place of sending and receipt' section. Additionally, California's version of UETA eliminates Sec. 16~20 of the NCCUSL version that related to transferable records and the use of electronic records by governmental agencies.³¹⁾

The scope of application is limited to the definition of transaction. However, does not apply to all document and signatures, but it applies to the records and signatures electronically way as stated in Sec. 3, (a).³²⁾ It defines 'electronic records' as a records created, generated, sent, communicated, received, or stored by electronic means(UETA, Sec. 2, (7)). And 'electronic signatures' means an electronic sound, symbol, or process

31) 「www.documents.dgs.ca.gov」 .

32) UETA, Sec. 3, (a), "...this (act) applies to electronic records and electronic signatures relating to a transaction."

attached to or logically associated with records and executed or adopted by a person with the intent to sign the records(UETA, Sec. 2, (8)).

In this case the 'transaction' means an action or set of actions occurring between two or more persons relating to the conduct of business, commercials, or governmental affairs(UETA, Sec. 2, 16)). In addition, the transactions that conduct in electronic way have to be agreed by both parties who binding in conducting transaction as stated in Sec. 5, (b).³³⁾

As mention before that the application scope of UETA is limited to the transactions in electronically way means that the transactions where the parties have agreed to conduct electronically. It to ensure the equivalent functional approach which means that the transaction is equivalent and have a same legal binding as traditional paper-based and handwritten methods transaction. Therefore, the electronic documents and electronic signatures carry the same weight and legal effect as traditional paper-based document and manual signatures or handwritten signatures. It aimed to remove any doubt related to the enforceability of electronic transactions and thereby removes the writing and signature requirement that will create barriers to electronic transactions in business, public and also government sector. The UETA is assures that the contracts and transactions are not denied in legal way because the electronic media are used.

The UETA applies to all the electronic records and signatures related to a transaction is include the e-mails, reports, memoranda, accounting records, or other documents connection with a transaction and as long as in electronic way.

The UETA also states that the electronic records, electronic signatures,

33) UETA, Sec. 5, (b), This act applies only to transactions between parties each of which has agreed to conduct transactions by electronic means. Whether the parties agree to conduct a transaction by electronic means is determined from the context and surrounding circumstances, including the parties' conduct.

and electronic contracts are enforceable and bind legally even there are in electronic form and satisfies with the law requirements. This legal procurement can be seen in Sec. 7.³⁴⁾ Spyrelli, 2002 also mentioned that UETA states that electronic signatures are legally accepted in court proceedings and that they meet signature requirements.

For the validity of electronic documents and signatures, as mentioned in the UETA, it supporting in Sec. 9,³⁵⁾ which provides that a signature is attributable to a person if the act of that person and may be shown in any manner include a showing of efficacy.

The contracts(includes documents and signatures) is valid if it formed by the electronic agents, such as computer programs that the operation is automatically conduct business in electronic form. By using electronic agents, it also can protect against errors by providing the proper standards for the technology's use to assure the identification of the involved parties. The UETA is divided in 21 Sections that we can see the table as following:

<Table 1> The Framework of UETA

Division	Provisions
Sec. 1	Short Title
Sec. 2	Definitions
Sec. 3	Scope
Sec. 4	Prospective Application

34) UETA, Sec. 7, (a), A record or signature may not be denied legal effect or enforceability solely because it is in electronic form. (b) A contract may not be denied legal effect or enforceability solely because an electronic record was used in its formation. (c) If a law requires a record to be in writing, an electronic record satisfies the law. (d) If a law requires a signature, an electronic signature satisfies the law.

35) UETA, Sec. 9, (a), An electronic record or electronic signature is attributable to a person if it was the act of the person. The act of the person may be shown in any manner, including a showing of the efficacy of any security procedure applied to determine the person to which the electronic record or electronic signature was attributable.

Sec. 5	Use of Electronic Records and Electronic Signatures; Variation by Agreement
Sec. 6	Construction and Application
Sec. 7	Legal Recognition of Electronic Record, Electronic Signatures and Electronic Contracts
Sec. 8	Provision of Information in Writing; Presentation of Records
Sec. 9	Attribution and Effect of Electronic Record and Electronic Signature
Sec. 10	Effect of Change or Error
Sec. 11	Notarization and Acknowledgement
Sec. 12	Retention of Electronic Records; Originals
Sec. 13	Admissibility in Evidence
Sec. 14	Automated Transaction
Sec. 15	Time and Place of Sending and Receipt
Sec. 16	Transferable Records
Sec. 17	Creation and Retention of Electronic Records and Conversation of Written Records by Governmental Agencies
Sec. 18	Acceptance and Distribution of Electronic Records by Governmental Agencies
Sec. 19	Interoperability
Sec. 20	Severability Clause

(ii) UCITA

The Uniform Computer Information Transactions Act(UCITA) was developed by the [National Conference of Commissioners on Uniform State Laws\(NCCUSL\)](#) in 1999. NCCUSL is the same organization that developed by the Uniform Commercial Code(UCC) in the middle of twentieth century. The last revisions or amendments of UCITA completed on 2002.

UCITA is a proposed state contract law developed to regulate transactions in intangible goods such as computer software, online databases and other digital products.³⁶⁾

UCITA was intended to act as Art. 2B of the UCC. Art. 2 comprises the law governing commercial transactions in the sale of goods and ensures

36) 「www.ala.org」 .

consistent contract laws from state to state. The stated goal of UCITA is to provide clarity regarding computer information transactions.³⁷⁾ Therefore, UCITA's drafters set out with the aim by outlining a new set of clear, consistent and uniform rules to give assuredness to businesses and consumer to do online transaction and software purchases. UCITA give such reliability to business and consumer to do transaction in electronically, other word that we can say as trustable.

The UCC was drafted because of the widespread concern that the contract rules applicable to a largely agricultural economy were inadequate for a new industrial age.³⁸⁾ Similarly, UCITA is designed to modernize contract law in response to the demands of commerce in a digital age.³⁹⁾ UCITA is more comprehensive in scope than UCC where the provisions of UCITA is covering the contracting parties' choice of law and choice of forum and also the relationship of UCITA with federal law, other state laws and others.⁴⁰⁾ By this we can see that UCITA is a comprehensive that combining of existing contract law(it modeled after the UCC art.2).

UCITA and UETA also have several similarities. Both of the acts are provide several things as following: (a) The equivalency of records and writings. (b) The validity of e-signatures. (c) The formation of contracts by e-agents. (d) The formation of contracts between an e-agent and a natural person. (e)The attribution of an electronic act to a person if it can be

37) Bowman, "The Uniform Computer Information Transactions Act: A Well Built Fence or Barbed Wire Around The Intellectual Commons?", *LBJ Journal of Public Affairs*, Vol. VIII, Spring, 2001, p.1.

38) Robert W. Hahn. A. Layne, Farrar, "An Economic Assessment of UCITA," *The AEI - Brookings Joint Center for Regulatory Studies*, 2001, p.1.

39) Lassman, Kent., "Contracts and Electronic Commerce: The Uniform Computer Information Transaction Act (UCITA)", *Periodic Commentaries on Policy Debate*, 2007.01, p.2.

40) See for example, UCITA 109~10.

proved that the act was done by the person or his or her agent. (f) A provision that parties do not need to participate in e-commerce to make binding contracts.⁴¹⁾

In the other hand, both of these acts also have differences. Below are the differences: (a) The UETA supports all electronic transactions, but it does not create rules for them. The UCITA concerns only contracts that involve computer information but for those contracts, the UCITA imposes rules. (b) The UETA does not apply unless contracting parties agree to use e-commerce in their transactions. The UCITA applies to any agreement that falls within its scope. (c) From above we can conclude that the main difference between the UETA and the UCITA is that UCITA addresses electronic commerce issues where the UETA does not addresses. Next, the composition of the UCITA is as following:

<Table 2> The Framework of UCITA

Division		Section
Part 1 General Provision	Short Title and Definitions	Sec. 101 ~ Sec.102
	General Scope and Terms	Sec. 103 ~ Sec.118
Part 2 Formation and Terms	Formation of Contract	Sec. 201 ~ Sec. 207
	Terms of Records	Sec. 208 ~ Sec. 210
	Electronic Contracts: Generally	Sec. 211 ~ Sec. 214
	Idea or Information Submission	Sec. 215
Part 3 Construction	General	Sec. 301 ~ Sec. 306
	Interpretation	Sec. 307 ~ Sec. 308
Part 4	Warranties	Sec. 401 ~ Sec. 410
Part 5 Transfer of Interest and Rights	Ownership and Transfers	Sec. 501 ~ Sec. 506
	Financing Arrangements	Sec. 507 ~ Sec. 511
Part 6 Performance	General	Sec. 601 ~ Sec. 605
	Performance in Delivery Copies	Sec. 606 ~ Sec. 610

41) M. Leroy, Roger. A. Jentz, Gaylord, *Law for E-Commerce*, Thomson South Western West, 2002, p.171.

	Special Types of Contracts	Sec. 611 ~Sec. 613
	Loss and Impossibility	Sec. 614 ~Sec. 615
	Termination	Sec. 616 ~Sec. 618
Part 7 Breach of Contract	General	Sec. 701 ~Sec. 703
	Defective Copies	Sec. 704 ~Sec. 707
	Repudiation and Assurances	Sec. 708 ~Sec. 710
Part 8 Remedies	General	Sec. 801 ~Sec.806
	Damages	Sec. 807 ~Sec. 810
	Remedies related to Performance	Sec. 811 ~Sec. 816
Part 9 Miscellaneous Provisions	Miscellaneous Provisions	Sec. 901 ~Sec. 905

(iii) E-Sign

The U.S. federal Electronic Signatures in Global and National Commerce Act(E-Sign) came into effect on 1st October 2000. It was enacted by the federal Congress. The Act was designed to promote the use of electronic signatures in commercial transactions involving both businesses and consumers and to ensure that the electronic documents and signatures resulting from these transactions are given the same legal validity and enforceability as written documents and signatures.⁴²⁾

The E-Sign Act facilitates the use of electronic records and signatures in interstate and foreign commerce and grants legal validity and enforceability to electronic signatures, contracts, and records.⁴³⁾ This general rule of validity does not apply, however, to the nine exceptions provided at Sec.

42) E-Sign, 15 U.S.C. §§ 7001~7006 (2000).

43) Victory, Nancy J., *et al.*, "Electronic Signatures: A Review of the exceptions to the Electronic Signatures in Global and National Commerce Act", *U.S Department of Commerce National Telecommunications and Information Administration*, 2003.

103 of the Act.⁴⁴⁾

The Act gives electronic signatures and documents equivalent legal status with handwritten signatures and paper-based documents. It is technological neutrality so that the parties entering into electronic contracts can choose the system they want to use to validate an online agreement.⁴⁵⁾

The law provides that no one is required to use or accept electronic documents or signatures. If a notice must be provided to a consumer in writing, an electronic version will meet that requirement only if the consumer consents to accepting an electronic version and can access the information in electronic form.⁴⁶⁾

The Act specifies that a state can preempt the federal law, but only by adopting the UETA or by passing a law that is consistent with the federal act and essentially technological neutrality. In addition, the Act does not apply to documents such as:⁴⁷⁾ (a) wills, codicils and testamentary trusts; (b) adoptions, divorce or other family law matters; (c) a notice of cancellation or termination of utility services or the default, acceleration, repossession, foreclosure or eviction under a credit agreement secured by, or a rental agreement for, an individual's primary residence; (d) the cancellation or termination of health or life insurance benefits; or (e) the recall or notification of a material failure of a product.

44) The nine exceptions to the E-Sign Act involve contracts and records governed by the following documents: 1) wills, codicils, and testamentary trusts; 2) laws governing domestic law matters; 3) state Uniform Commercial Code, except section 1-107 and 1-206, Articles 2 and 2A; 4) court orders or notices; 5) utility cancellation notices; 6) default, foreclosure, or eviction notices; 7) health or life insurance benefit cancellation notices; 8) product recall notices; and 9) hazardous, toxic, or dangerous materials notices.

45) D. Alysia, *op cit.*, p.2.

46) *Ibid*, p.13.

47) *Ibid*, p.13.

Although many states have passed electronic signature laws, the U.S. Congress held the view that a federal law was necessary because state electronic signature and electronic commerce statutes lacked uniformity. Some states, for example, provide that any type of electronic signature is valid. Others require some form of security such as tying the electronic signature to the person signing or being able to determine that the electronic message has not been altered. Still others recognize only digital signatures.

In addition, state laws have provided different uses for electronic signatures. Some laws allow electronic signatures to be used only in relation to transactions with government agencies; others allow the signatures to be used only for certain kinds of commercial transactions.⁴⁸⁾

The E-Sign is divided into four part where here it using 'title' terminology for the division part. The framework of E-Sign are as following:

<Table 3> The Framework of E-Sign

Division	Provisions
	Sec. 1: Short Title
Title I Electronic Records And Signatures in Commerce	Sec. 101: General Rule of Validity
	Sec. 102: Exemption to Preemption
	Sec. 103: Specific Exceptions
	Sec. 104: Applicability to Federal and State Governments
	Sec. 105: Studies
	Sec. 106: Definitions
	Sec. 107: Effective Date
Title II Transferable Records	Sec. 201: Transferable Records
	Sec. 202: Effective Date
Title III Promotion of International Electronic Commerce	Sec. 301: Principles Governing The Use of Electronic Signatures in International Transactions
Title IV Commission on Online Child Protection	Sec. 401: Authority to Accept Gifts

48) *Ibid*, p.13.

(2) Japan

'ECOM' was founded in 1996 as the Electronic Commerce Promotion Council of Japan under the guidance of the Ministry of Economy, Trade and Industry (Ministry of International Trade and Industry at that time) and changed its organization under the same English name (Electronic Commerce Promotion Council of Japan) in 2000 (as a result of incorporation with the Japan EC/CALS Organization). ECOM consistently aims to promote the sound development of EC in Japan, and has been making efforts to establish rules to ensure secure EC for both general consumers and business-to-business transactions, to conduct a wide range of activities including surveys, research projects and proposals on consumer protection, security measures, the use of electronic government and other similar issues, and to advance international standardization based on the needs of users.⁴⁹⁾

(3) Germany

'Gesetz zur Regelung der Rahmenbedingungen für Informations und Kommunikationsdienste, IuKDG' (Law to Regulate the Framework Conditions for Information and Communications Services) is entered into force largely on 1st August 1997.

This act regulates several issues as a framework act, including teleservices and ISP liability, art. 1, the protection of personal data in teleservices, (art. 2), and digital signatures, (art. 3), and also it adapts existing legislation.

There are 11 Articles in Law to Regulate the Framework Conditions for

49) Next Generation Electronic Commerce Promotion Council of Japan, "Electronic Commerce", *ECOM Journal*, 2006, p.8.

Information and Communications of Germany. The Art. 1 is 'Act on the Utilization of Teleservices(Teleservices Act - Teledienstegesetz TDG),' Art. 2 'Act on the Protection of Personal Data Used in Teleservices(Teleservices Data Protection Act - Teledienstedatenschutzgesetz TDDSG),' Art. 3 'Act on Digital Signature(Digital Signature Act - Signaturgesetz - SigG),' Art. 4 'Amendment of the Penal Code(Strafgesetzbuch),' Art. 5 'Amendment of the Administrative Offences Act(Ordnungswidrigkeitengesetz),' Art. 6 'Amendment of the Act on the Dissemination of Publications Morally Harmful to Youth(Gesetz über die Verbreitung jugendgefährdender Schriften),' Art. 7 'Amendment of the Copyright Act(Urheberrechtsgesetz),' Art. 8 'Amendment of the Price Indication Act(Preisangabengesetz),' Art. 9 'Amendment of the Price Indication Ordinance(Preisangabenverordnung),' Art. 10 'Return to Uniform Order of Ordinance(Rückkehr zum einheitlichen Verordnungsrang)' and Art. 11 'Entry into Force.'

This Act purposes is to establish a reliable foundation in the information and communication services field, to create a balance between free competition, the legitimate needs of the user and the interests of public order and to promote the economic development of this sector.

(4) Korea

Korea has two basic EC acts that stand independently and its enacted to promote e-commerce objectives. these act are the FAEC and DSA.

The FAEC was implemented in 1999, it has broadly defined how e-commerce is regulated and online transactions should be handled legally in South Korea. The FAEC provides general policy measures to promote e-commerce. The last amendment of this act is on 23th August 2009.

The purpose of this act is meant to give electronic documents an equal level of legal validity on paper documents and by regulating basic matters

related to achieving reliability, protecting consumer rights and implementing policies to promote e-commerce, with a view to creating a legally predictable environment in which users can make secure transactions in the Information Age.⁵⁰⁾ It can be seen that the purpose of this act is to extend the government's role in the promotion of e-commerce and to support free e-commerce in Korea.

In the other hand, the legislation of Electronic Signatures in Korea is known as Digital Signature Act(hereinafter referred as 'DSA'). The DSA was implemented under the jurisdiction of the Ministry of Information and Communication, and it set the stage for electronic proliferation in 1999. DSA was last amended by Act No. 10008 on 4th February 2010. Before the amendment, DSA was known as 'Electronic Signature Act.' Because of the enhancement Electronic Signature Act was changed into Digital Signature Act in 1999.

While the FAEC provides for general policy measures to promote EC, DSA is focused on achieving the security and reliability of digital documents with clear provisions regarding digital signature technologies, as well as, the designation and management of the accredited certification authorities.

This act applies to digital signatures found in the context of commercial activities. Digital signature is defined as a piece of information in digital form affixed on, or logically combined to, an electronic message in order to identify the signer and verify that the electronic message has been signed by that signer(DSA, Art. 1).

The DSA was regulated to encourage the development of e-commerce in South Korea. DSA establishes the legal validity, enforceability and admissibility of digital signatures where the digital signatures certified by government and approved by the certification authorities have the same

50) OECD Forum on Electronic Commerce, 12~13 October 1999, p.3.

legal effect, like hand written signatures.

As stated in DSA, the purpose of DSA is to establish the basic framework for digital signatures to achieve the integrity and reliability of electronic messages; in order to promote their use, thereby stimulating the use of electronic records and communications(DSA, Art. 1).

2) International Organizations

(1) UNCITRAL

(i) MLEC

The United Nations Commission on International Trade Law(UNCITRAL) adopted Model Law on Electronic Commerce(MLEC) in June 1996 (Kuechler & Grupe, 2003). The model Law was developed to establish internationally accepted rules for electronic commerce and to help structure a secure legal environment for e-commerce activities (Broderick, Gibson, & Tarasewich, 2001).

The MLEC was develop in response to the rapid changes that were taking place in methods of communication used to conduct business and international trade. As the use of electronic mail and electronic data interchange increased and became more prevalent, the existence of legal impediments to electronic communications and uncertainty about their legal effect and validity became evident.⁵¹⁾ MLEC with Guide to Enactment 1996 is the peak model law for technological neutrality electronic signature legislation.

The MLEC purposes are to enable and facilitate commerce conducted using electronic means by providing national legislators with a set of

51) D. Alysia, *op cit.*, p.2.

internationally acceptable rules aimed at removing legal obstacles and increasing legal predictability for electronic commerce. In particular, it is intended to overcome obstacles arising from statutory provisions that may not be varied contractually by providing equal treatment to paper-based and electronic information. Such equal treatment is essential for enabling the use of paperless communication, thus fostering efficiency in international trade.⁵²⁾

UNCITRAL's decision to formulate model legislation on electronic commerce was also a response to the fact that much of existing legislation governing the communication and storage of information did not contemplate the use of electronic commerce. In a number of cases, the legislation in place imposed or implied restrictions on the use of modern means of communication, for example, by prescribing the use of 'written,' 'signed' or 'original' documents.⁵³⁾

The model law on electronic commerce adopts a 'functional equivalent approach' for electronic document and paper-based document to dealing with electronic commerce. This approach is based on analyzing the purposes and function of the paper-based requirements, how those purposes and functions can be fulfilled through electronic techniques.⁵⁴⁾ The framework of MLEC is as following:

52) 「www.uncitral.org」.

53) United Nations Commission on International Trade Law, *UNCITRAL Model Law on Electronic Commerce with Guide to Enactment 1996*, New York, 1999, para.3, p.16.

54) D. Alysia, *op. cit.*, p.2.

<Table 5> The Framework of MLEC

Part I Electronic Commerce in General	Chapter I General Provisions	Art. 1: Sphere of Application
		Art. 2: Definitions
		Art. 3: Interpretation
		Art. 4: Variation by Agreement
	Chapter II Application of Legal Requirements to Data Messages	Art. 5: Legal Recognition of Data Messages
		Art. 6: Writing
		Art. 7: Signature
		Art. 8: Original
		Art. 9: Admissibility and Evidential Weight of Data Messages
	Chapter III Communication of Data Messages	Art. 10: Retention of Data Messages
		Art. 11: Formation and Validity of Contracts
		Art. 12: Recognition by Parties of Data Messages
		Art. 13: Attribution of Data Messages
		Art. 14: Acknowledgement of Receipt
Part II Electronic Commerce in Specific Areas	Chapter IV Carriage of Goods	Art. 15: Time and Place of Dispatch and Receipt of Data Messages
		Art. 16: Action Related to Contracts of Carriage of Goods
		Art. 17: Transport Documents

(ii) UECIC

UN Convention on the Use of Electronic Communications in International Contracts(UECIC) was adopted by the General Assembly in 23 November 2005 and has been signed by 18 Nations and so far namely in Asia, South America, Africa and the Middle East, both of China and Russia have

signed the Convention either. And Honduras was the first nation that ratify the treaty on June 15th 2010 where requires 2 more ratifications to enter into force.

The convention that prepared by UNCITRAL is establishes rules for establishing the location of a party, the time and place of dispatch, and the use of automated message systems in electronic contracts. It also addresses questions of establishing functional equivalence between electronic contracts and paper contracts, including electronic signatures.⁵⁵⁾

The convention is accompanied by an explanatory note prepared by the UNCITRAL secretariat, which includes useful information on the history and the intended sphere of application of each article and the convention itself.⁵⁶⁾

The UNCITRAL was established in 1966 with the general mandate to further the progressive harmonization and unification of the law of international trade. Six working groups (on procurement, international arbitration and conciliation, transport law, electronic commerce, insolvency law and security interests) prepare drafts for model laws and recommendations for their interpretation that are presented for adoption at the Annual Meeting. UNCITRAL has 66 member states to date, however, the model laws and international treaties have exceeding membership and significance in international trade.⁵⁷⁾

The scope application of UECIC is applies to the use of electronic communications in connection with the formation or performance of a contract between parties whose places of business are in different. The fact that the parties have their places of business in different States is to be

55) United Nations Convention on the Use of Electronic Communications in International Contracts Ratified, *Nordic Journal of Commercial Law*, 2010, p.1.

56) *Ibid*, p.1.

57) *Ibid*, p.2.

disregarded whenever this fact does not appear either from the contract or from any dealings between the parties or from information disclosed by the parties at any time before or at the conclusion of the contract. The composition of UECIC are as following:

<Table 6> The Framework of UECIC

Chapter I Sphere of Application	Art. 1: Scope of application
	Art. 2: Exclusions
	Art. 3: Party autonomy
Chapter II General Provisions	Art. 4: Definitions
	Art. 5: Interpretation
	Art. 6: Location of the parties
Chapter III Use of Electronic Communications in International Contracts	Art. 7: Information requirements
	Art. 8: Legal recognition of electronic communications
	Art. 9: Form requirements
	Art. 10: Time and place of dispatch and receipt of electronic communications
	Art. 11: Invitations to make offers
	Art. 12: Use of automated message systems for contract formation
	Art. 13: Availability of contract terms
Chapter IV Final Provisions	Art. 14: Error in electronic communications
	Art. 15: Depositary
	Art. 16: Signature, ratification, acceptance or approval
	Art. 17: Participation by regional economic integration organizations
	Art. 18: Effect in domestic territorial units
	Art. 19: Declarations on the scope of application
	Art. 20: Communications exchanged under other international conventions
	Art. 21: Procedure and effects of declarations
	Art. 22: Reservations
	Art. 23: Entry into force
	Art. 24: Time of application
	Art. 25: Denunciations

(2) OECD

The OECD is a unique forum where the governments of 30 democracies work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The organization provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.⁵⁸⁾

The "Recommendation on Electronic Authentication and the Guidance for Electronic Authentication" has been developed by the OECD Committee for Information, Computer and Communications Policy (ICCP), through its Working Party on Information Security and Privacy (WPISP). The work has been led by Jane Hamilton from Industry Canada with the support of delegates from Australia, France, Hungary, Korea, Norway, the United States, the OECD Secretariat and the Business and Industry Advisory Committee (BIAC) to the OECD. The draft Recommendation was adopted as a Recommendation of the OECD Council on 12th June 2007. The Guidance for Electronic Authentication, was adopted by the ICCP Committee in April and declassified on 12th June 2007 by the OECD Council.⁵⁹⁾

58) OECD Recommendation on Electronic Authentication and OECD Guidance for Electronic Authentication, 2007.

59) *Ibid*, p.4.

(3) ICC

The International Chamber of Commerce(ICC) was founded in 1919. ICC is the largest and most representative business organization in the world. The purpose of ICC is to serve world business by promoting trade and investment, open markets for goods and services, and the free flow of capital.⁶⁰⁾ There are hundreds of thousands of member companies in over 130 countries that have interest to extend in all sector of private enterprise.

Recently as stated in ICC formal websites, ICC has been following the UNCITRAL efforts to regulate companies that using data messages, in other word electronic contracting via email. By observing the sessions of UNCITRAL WG IV, therefore it provides 'ICC E-TERMS 2004' as well as the 'ICC Guide to Electronic Contracting.' ICC help to develop the "international draft convention on the legal aspects of electronic commerce" and offered business expertise."

Additionally, ICC also worked closely with UNCITRAL on the [UNCITRAL Model Law on Electronic Signatures](#) and the [UNCITRAL Model Law on Electronic Commerce](#) where this projects allow for legal certainty concerning the use of electronic signatures and utilization of modern means of communications as well as the storage of information.

The reason ICC offers eTerms 2004 is to response to the challenges and opportunities through new technologies which shape business practice.⁶¹⁾ With ICC eTerms 2004 in place, the parties have intentionally agreed to contract electronically.⁶²⁾

60) 「www.iccwbo.org」 .

61) 「www.iccwbo.org」 .

62) By agreeing to abide by ICC eTerms 2004, the parties make it clear to arbitrators and judges resolving any disputes they might have on the workings of the substantive contract between them that they do not have a dispute about the technical means by which they had contracted.

ICC eTerms 2004⁶³⁾ are designed to enhance the legal certainty of contract that made by electronic way like through email, websites or EDI. It can uses for any contract for the sale or other disposition of goods, rights or services.

(4) EU

The EU Electronic Commerce Directive 2000/31/EC of the [European Parliament](#) and of the Council of 8th June 2000 on certain legal aspects of [information society](#) services, in particular [electronic commerce](#), in the [internal market](#) was adopted in 2000 by EU. The 'Electronic Commerce Directive' was sets up an internal market framework for the electronic commerce.

The aim of 'EU Electronic Commerce' is to provide legal certainty for business and consumers alike. It establishes harmonized rules on issues

63) ICC eTerms 2004, Art. 1 (E-commerce agreement): The parties agree: 1.1 that the use of electronic messages shall create valid and enforceable rights and obligations between them; and 1.2 that to the extent permitted under the applicable law, electronic messages shall be admissible as evidence, provided that such electronic messages are sent to addresses and in formats, if any, designated either expressly or implicitly by the addressee; and 1.3 not to challenge the validity of any communication or agreement between them solely on the ground of the use of electronic means, whether or not such use was reviewed by any natural person. Art. 2 (Dispatch and Receipt): 2.1 An electronic message is deemed to be: (a) dispatched or sent when it enters an information system outside the control of the sender; and (b) received at the time when it enters an information system designated by the addressee. 2.2 When an electronic message is sent to an information system other than that designated by the addressee, the electronic message is deemed to be received at the time when the addressee becomes aware of the message. 2.3 For the purpose of this contract, an electronic message is deemed to be dispatched or sent at the place where the sender has its place of business and is deemed to be received at the place where the addressee has its place of business.

such as the transparency and information requirements for online [service providers](#), commercial communications, electronic contracts and limitations of [liability](#) of intermediary service providers.⁶⁴⁾

The e-commerce directive is divided into 4 chapters with 24 Articles and makes several provisions on the liability of intermediaries. First Chapter is 'General Provisions,' second chapter is 'Principles,' third chapter is 'Implementation' and the last chapter is 'Final Provisions.'

In e-Commerce Directive, it explains the contract concluded by electronic means in Art. 9 related to the contract treatment and Art. 10 related to information to be provided.⁶⁵⁾⁶⁶⁾

64) 「www.ec.europa.eu」.

65) Art. 9 (Treatment of contracts): 1. Member States shall ensure that their legal system allows contracts to be concluded by electronic means. Member States shall in particular ensure that the legal requirements applicable to the contractual process neither create obstacles for the use of electronic contracts nor result in such contracts being deprived of legal effectiveness and validity on account of their having been made by electronic means. 2. Member States may lay down that paragraph 1 shall not apply to all or certain contracts falling into one of the following categories: (a) contracts that create or transfer rights in real estate, except for rental rights; (b) contracts requiring by law the involvement of courts, public authorities or professions exercising public authority; (c) contracts of surety ship granted and on collateral securities furnished by persons acting for purposes outside their trade, business or profession; (d) contracts governed by family law or by the law of succession. 3. Member States shall indicate to the Commission the categories referred to in paragraph 2 to which they do not apply paragraph 1. Member States shall submit to the Commission every five years a report on the application of paragraph 2 explaining the reasons why they consider it necessary to maintain the category referred to in paragraph 2(b) to which they do not apply paragraph 1.

66) Art. 10 (Information to be provided): 1. In addition to other information requirements established by Community law, Member States shall ensure, except when otherwise agreed by parties who are not consumers, that at least the following information is given by the service provider clearly, comprehensibly and unambiguously and prior to the order being placed by the recipient of the service: (a) the different technical steps to

Chapter III

The Comparison of Indonesian and Korean Law Related to EC

1. The Law of Electronic Information and Transactions in Indonesia

1) Enactment Purpose

The official name of Indonesia Electronic Transactions Act is The Law of Electronic Information and Transactions (LEIT). According to history, LEIT was enacted in 2008 and comparable to Singapore⁶⁷⁾ and Malaysia⁶⁸⁾, as well as, other advanced country. LEIT is enacted more lately compared to other member countries of AFTA. The scope of application is broader and more comprehensive, especially in definition, its details are compared to the FAEC and other related electronic transactions act.

An example of the comprehensive side of LEIT includes not only electronic information transactions but also electronic signature and

follow to conclude the contract; (b) whether or not the concluded contract will be filed by the service provider and whether it will be accessible; (c) the technical means for identifying and correcting input errors prior to the placing of the order; (d) the languages offered for the conclusion of the contract. 2. Member States shall ensure that, except when otherwise agreed by parties who are not consumers, the service provider indicates any relevant codes of conduct to which he subscribes and information on how those codes can be consulted electronically. 3. Contract terms and general conditions provided to the recipient must be made available in a way that allows him to store and reproduce them. 4. Paragraphs 1 and 2 shall not apply to contracts concluded exclusively by exchange of electronic mail or by equivalent individual communications.

67) Evidence Act of Singapore 1997, *"The policy research of electronic commerce countries strategy's collection in each field"*, 2000, pp.165~166.

68) Electronic signature Act of Malaysia, 1997.

intellectual property rights, protection of privacy rights, dispute resolution, role of the government and the public, investigation, penal provisions and transitional provisions. Therefore, LEIT is constructed by an omnibus framework.

Meanwhile, for the electronic systems in preamble, the application scope of electronic systems also include the objects of electronic system in the flexible to applied in law standard. Due to the rapidity of the information technology field, the operational scope and application object of electronic system are extensible and flexible, both directly and indirectly.

Nevertheless, compared to the other acts, LEIT sends and receives scope related to electronic information transaction, network and information processing system which are not limited, in addition, between the clusters, LEIT is extensible. Nowadays according to the development of information communication technology, it is legal and safe, free from any fraudulence.

Therefore, through announcing the LEIT formally, it recognizes the role of promoting 'Electronic Information Transactions' in Indonesia and Indonesia's trade and economic growth. On the national level, through the optimal regulation of transactions and electronic information, the development, distribution, promotion and prevent improvement use of information technology.

In addition, the composition of LEIT is very comprehensive, therefore it is expected that related and subordinate acts have to be amended or revised. Thus, the infrastructure of information technology, whether it develop or not, the infrastructure of information technology has to be supplemented and improved.

LEIT is created according to the provisions and principles of UNCITRAL MLEC, UNCITRAL MLES, EU Directives on Electronic Commerce, EU Directives on Electronic Signature and Convention on Cyber Crime. Those provisions is the International regulation that most applied in European

countries, United States and Asia. Therefore, the content of LEIT have a lot of similarities of MLEC, MLES, EU Directives on Electronic Commerce, EU Directives on Electronic Signature and Convention on Cyber Crime.

2) Composition System

There are 13 chapters and 54 Articles which elucidate the contents of LEIT generally. The main point of the contents is that the electronic information transactions are composed comprehensively in electronic transactions, electronic signatures, dispute resolution and investigation.

The methodology of this research is using comparison analysis tool whereby LEIT is compared to MLEC and other advanced countries' legal acts. Generally, no adjustments are being made to the computation of the results, but most importantly, more attention will be paid to the purpose of the lower rank legislation. The composition of LEIT is reflected in the table below:

<Table 7> The Framework of LEIT

Article	Divisions
1 - 2	Chap. I: General Provisions
3 - 4	Chap. II: Principles and Objectives
5 - 12	Chap. III: Electronic Information, Records and Signatures
13 - 16	Chap. IV: Provision of Electronic Certification and Electronic Systems
17 - 22	Chap. V: Electronic Transactions
23 - 26	Chap. VI: Domain Names, Intellectual Property Rights and Protection of Privacy Rights
27 - 37	Chap. VII: Prohibited Acts
38 - 39	Chap. VIII: Dispute Resolution
40 - 41	Chap. IX: Role of the Government and Role of the Public
42 - 44	Chap. X: Investigation
45 - 52	Chap. XI: Penal Provisions
53	Chap. XII: Transitional Provisions
54	Chap. XIII: Concluding Provisions

There are two main points to be noted in the LEIT framework: Firstly, electronic signature and electronic authentication. Under Indonesia's electronic signature law and electronic authentication law come under one body. There is no specialization of electronic signature law and electronic authentication law in LEIT. The regulation related to the electronic signature and electronic authentication is in Art. 11. Secondly, in relation to the electronic commerce regulation in LEIT, it is special and very comprehensive. It encompasses the protection of privacy rights, intellectual property rights and domain name.

Related to the composition system, there are 3 things that will be explained as following:

(1) General Provisions

The general provisions in LEIT is mentioned in Chapter 1, from Art. 1 & Art. 2. in Article 1, LEIT explains twenty-three definitions that will be explained later in definitions and others part.

In article 2, LEIT explains that this law shall apply to any person who commits legal acts as governed by this law, both within jurisdiction of Indonesia, having legal effect within jurisdiction of Indonesia and/or outside jurisdiction of Indonesia and detrimental to the interest of Indonesia. This Article 2 means that since information technology usage for electronic information and electronic transactions is cross-territorial or universal in nature, this law shall have jurisdiction over legal acts applicable not only in Indonesia and/or committed by Indonesian citizens, but also applicable to legal acts committed outside jurisdiction of Indonesia by both Indonesian citizens and foreign citizens or Indonesian legal entities and foreign legal entities having legal effect in Indonesia. "Detrimental to the interest of Indonesia" shall include but not limited to detrimental to the

interests of national economy, strategic data protection, nation's dignity and degree, state defense and security, sovereignty, citizens as well as Indonesian legal entities(LEIT, Art.2).

(2) Definitions and others

As mentioned above that in the general provisions part of LEIT, there are 23 terms that defined in Article 1 and the definitions are, as following:

'Electronic Information' means one cluster or clusters of electronic data, including but not limited to writings, sounds, images, maps, drafts, photographs, electronic data interchange(EDI), electronic mails, telegrams, telex, telecopy or the like, letters, signs, figures, Access Codes, symbols or perforations that have been processed for meaning or understandable to persons qualified to understand them(LEIT, Art. 1, (1)).

'Electronic Transactions' means a legal act that is committed by the use of Computers, Computer networks, and/or other electronic media(LEIT, Art. 1, (2)).

'Information Technology' means a technique to collect, prepare, store, process, announce, analyze, and/or disseminate information(LEIT, Art. 1, (3)).

'Electronic Record' means any Electronic Information that is created, forwarded, sent, received, or stored in analog, digital, electromagnetic, optical form, or the like, visible, displayable and/or audible via Computers or Electronic Systems, including but not limited to writings, sounds, images, maps, drafts, photographs or the like, letters, signs, figures, Access Codes, symbols or perforations having certain meaning or definition or understandable to persons qualified to understand them(LEIT, Art. 1, (4)).

'Electronic System' means a set of electronic devices and procedures that functions to prepare, collect, process, analyze, store, display, announce,

send, and/or disseminate Electronic Information(LEIT, Art. 1, (5)).

‘Provision of Electronic System’ means an Electronic System usage by the state administrators, Persons, Business Entities, and/or the public(LEIT, Art. 1, (6)).

‘Electronic System Network’ means a closed or open connection of two Electronic Systems or more(LEIT, Art. 1, (7)).

‘Electronic Agent’ means an automated electronic means that is used to initiate an action to certain Electronic Information, which is operated by Persons(LEIT, Art. 1, (8)).

‘Electronic Certificate’ means a certificate in electronic nature that bears an Electronic Signature and identity, demonstrating a status of a legal subject of parties to an Electronic Transaction issued by Certification Service Providers(LEIT, Art. 1, (9)).

‘Electronic Certification Service Provider’ means a legal entity that acts as a reliable party, issues and audits Electronic Certificates(LEIT, Art. 1, (10)).

‘Trustworthiness Certification Body’ means an independent institution that is formed by professionals acknowledged, certified, and supervised by the Government, whose authority is to audit and issue trustworthiness certificates for Electronic Transactions(LEIT, Art. 1, (11)).

‘Electronic Signature’ means a signature that contains Electronic Information that is attached to, associated or linked with other Electronic Information that is used for means of verification and authentication(LEIT, Art. 1, (12)).

‘Singnatory/Signer’ means a legal subject associated or linked with an electronic signature(LEIT, Art. 1, (13)).

‘Computer’ means an electronic, magnetic, optical data processing device, or a system that performs logic, arithmetic, and storage functions(LEIT, Art. 1, (14)).

‘Access’ means an activity to make interaction with independent or

network Electronic Systems(LEIT, Art. 1, (15)).

‘Access Code’ means a figure, letter, symbol, other character or a combination thereof, which is a key to enable Access to Computers and/or other Electronic Systems(LEIT, Art. 1, (16)).

‘Electronic Contract’ means an agreement of parties entered into by means of Electronic Systems(LEIT, Art. 1, (17)).

‘Sender/Originator’ means a legal subject that sends Electronic Information and/or Electronic Records(LEIT, Art. 1, (18)).

‘Recipient/Addressee’ means a legal subject that receives Electronic Information and/or Electronic Records from Senders/Originators(LEIT, Art. 1, (19)).

‘Domain Name’ means an internet address of a state administrator, Person, Business Entity, and/or the public that can be used for communication over the internet, in the form of unique character code or set to identify a certain location on the internet(LEIT, Art. 1, (20)).

‘Person’ means an individual, whether an Indonesian citizen, foreign citizen, or legal entity(LEIT, Art. 1, (21)).

‘Business Entity’ means a sole proprietorship or partnership of both legal entity and non-legal entity(LEIT, Art. 1, (22)).

‘Government’ means a Minister(s) or other official(s) the President designates(LEIT, Art. 1, (23)).

(3) Main Characteristics

LEIT defines the scope application and definition terminology in general provisions more detailed and general for each terminology. LEIT is more comprehensive and flexible because it enacted in 2008, its enacted later than other countries. LEIT also explains several terminology that can not be found in FAEC.

The electronic signature law of Indonesia is under LEIT, it does not stand independently. Therefore, it can be seen that the electronic signature law under LEIT is explained in general way and broader.

2. The Framework Act on Electronic Commerce in Korea

1) Enactment Purpose

The purpose of this act is meant to give electronic documents an equal level of legal validity on paper documents and by regulating basic matters related to achieving reliability, protecting consumer rights and implementing policies to promote e-commerce, with a view to creating a legally predictable environment in which users can make secure transactions in the Information Age.⁶⁹⁾ It can be seen that the purpose of this act is to extend the government's role in the promotion of e-commerce and to support free e-commerce in Korea.

Therefore, from above it can be concluded that the FAEC was established to validate online transactions through electronic documents for securing users' safety and trust, and for fair trade. For the equivalent validation of electronic documents and signatures, as with paper documents and its signatures and seals, it has established electronic transaction according to this Act, in doing so, electronic documents and signatures will be effective and legally binding which is comparable to paper-based documents.

2) Composition system

The FAEC consists of 7 chapters with 46 Articles in total. The

⁶⁹⁾ OECD Forum on Electronic Commerce, 12~13 October 1999, p.3.

composition of the FAEC is reflected as following:⁷⁰⁾

<Table 8> The Framework Act on Electronic Commerce

Chapter	Divisions
1 - 3	Chap. I: General Provisions
4 - 11	Chap. II: Electronic Documents
12 - 18	Chap. III: Ensuring Security in Electronic Commerce and Protection of Consumers
19 - 22	Chap. IV: Formulation of Basic Policy on Electronic Commerce and Systems for Its Promotion
23 - 31	Chap. V-1: Promotion of Electronic Commerce and Creation of Basis
31.2 - 31.17	Chap. V-2: Authorized Electronic Documents Depository
32 - 42	Chap. VI: Electronic Commerce Mediation Committee
43 - 46	Chap. VII: Penal Provisions

(1) General Provisions

In FAEC, it explains that the purpose of this Act is to contribute to the national economy by clarifying legal relations of the electronic commerce, ensuring its security and reliability and laying the foundation for its promotion(FAEC, Art. 1).

(2) Definitions and others

In FAEC, there are 8 term that defined in Article 2 and the definitions are as following:

The term 'Electronic Document' means any information prepared, transmitted, received or stored in the electronic form by the information processing system(FAEC, Art. 2, (1)).

The term 'information processing system' means any electronic apparatus or system with an ability to process information, which is used in

⁷⁰⁾ The Framework Act on Electronic Commerce

preparing, transmitting, receiving or storing electronic documents(FAEC, Art. 2, (2)).

The term 'originator' means a person who prepares and transmits an electronic document(FAEC, Art. 2, (3)).

The term 'addressee' means the other party to whom the originator transmits an electronic document(FAEC, Art. 2, (4)).

The term 'electronic commerce' means any transaction of which the whole or part of goods or service is made through electronic documents in transacting goods or service(FAEC, Art. 2, (5)).

The term 'business operator of electronic commerce' means a person who operates a business of electronic commerce(FAEC, Art. 2, (6)).

The term 'user of electronic commerce' means a person who uses electronic commerce other than the business operator of electronic commerce(FAEC, Art. 2, (7)).

The term 'authorized electronic documents depository' means a juristic person performing the business of custody or certification of electronic documents for others, or other businesses related to electronic documents (hereinafter referred to as "custody of electronic documents, etc."), after designated pursuant to Article 31~2, (1)(FAEC, Art. 2, (8)).

(3) Main Characteristics

From the general provisions and definition part, it can be seen that FAEC explains the using terminology more specified than LEIT. FAEC is stand independent and separately from electroni signature regulation which known as DSA.

3. The Result of Comparison

From the explanation above related to the LEIT and FAEC, there are several result of comparison, as following:

First, compared to other countries' regulations, LEIT is enacted later in 2008, therefore it is enacted later than other countries, thus it is more comprehensive and flexible. It has become the strong point for LEIT.

Second, considering for the scope application and legal function and extensibility, definition terminology in LEIT is very broad and extensive. LEIT defines 23 terms in general provisions and FAEC only defines 8 terms in general provisions part. the term that does not defines FAEC are "electronic information, information technology, provisions of electronic system, electronic system network, computer, access, access code, electronic contract, domain name, person, business entity and government." Those term are explained in LEIT and FAEC did not define it. LEIT explain the term more detailed and exclusive than FAEC.

Third, there are several terms that stated in LEIT is different with the terms that stated in FAEC, however they have the same meaning. Those term are "electronic transaction, electronic record, electronic system, sender/originator and recipient/addressee." The term 'electronic transaction' is used in LEIT but in FAEC, it using 'electronic commerce' term. In LEIT, it using 'electronic record' term but in FAEC, it using 'electronic document' term. LEIT is using 'electronic system' term and FAEC is using 'information processing system'. LEIT is using 'sender/originator' and FAEC is only uses 'originator' term. LEIT is using 'recipient/addressee' but FAEC is only uses 'addressee' term.

Fourth, there are two terminology that explained in FAEC but LEIT did not explain it. There are 'business operator of electronic commerce' and 'user of electronic commerce' term. It can seen that, FAEC explain more

specified than LEIT do. LEIT explains more in general way by using 'person', 'business entity' and 'government' term.

Fifth, there are several terms that defined in LEIT but in DSA. As we know that, FAEC and DSA is stand independently and separately but in Indonesia the electronic signature regulation is under LEIT, therefore in general provisions LEIT also explains 'electronic signature' term. The terms that explained in LEIT and in DSA have same meaning even though the using term is different. Those terms are 'electronic signature' term that used in LEIT but in DSA, it using 'digital signature' terms. LEIT is using 'electronic certificate' term but in DSA, it only uses 'certified digital signature' term. LEIT is using 'electronic certification service provider' term and in DSA, it using 'authorized certification work' term. LEIT is using 'trustworthiness certification body' and DSA is using 'licensed certification authority' term.

Sixth, the extensibility and scope of application of electronic system includes the object of electronic system is flexible for applied compare to other regulation.

Seventh, the scope of sending and receiving in regard to electronic information transaction, network and information processing system is not limited. In addition, amongst the cluster themselves, it is extensible and nowadays according to the development of information communication technology, it is legal, safe and secure.

Eighth, as to the electronic contract, it has a legally binding force and it secures the legal position of qualified contract parties, which guarantees the function of proper legal binding force.

Ninth, the application scope of electronic transaction can be civil and a commercial activity. This vision is broader and covers the application's object of electronic system. This is a remarkable legal meaning in the enactment purposes of LEIT.

Tenth, in regard to the electronic transaction and electronic commerce, there are no differentiation meaning of electronic transaction and electronic commerce.

Eleventh, the electronic signatures and electronic authentication regulation, there is no separate or independent regulation.

Twelfth, in the FAEC, there is no separate regulation related to electronic agent and automated messages system as both of these regulations are included inside the scope of information processing system.

Thirteenth, in FAEC, it secures the equivalent function of data message. In the event that it needs the requirement of data message with other law then it needs to add the limitation requirement in the authentication application.

Fourteenth, for the equivalent function of data message, if FAEC is applied internationally, the supplemental regulation and form requirement of limitation requirement is insufficient.

Fifteenth, the effect of information processing system and automated message system is very clearly shown in the electronic installation and system.

Sixteenth, in FAEC there is no special regulation in relation to the creator, creator agent or the required definition of sender and automated system. Therefore, there are limitations and can not apply in the regulation of data message.

Chapter IV

The Assessment and Implication of Electronic Information and Transactions Law in Indonesia

1. Main Points

The General Provisions in Chapter 1 includes a preamble which encompasses a detailed explanation on the electronic system. In addition, the content of this General Elucidation of the Electronic Information and Transactions system is functional and extensive. For a more detailed explanation, it can be seen in the definition regulation of Chapter 1, Article 1.

The purpose of the detailed definition of electronic system is for accommodating the active development and rapid progress of information communication technology. Because of the undue hardship of LEIT, it is for the purpose of continuous legal security.

The basic purpose are the information technology, media and electronic communications. Nowadays after globalisation, it required the changing in public sector and increasing private welfare and the fact is can be seen through the leading role in manage the proper function development in all fields, such as economic, culture and social.

On the other hand, in Chapter 1 Article 1, it provides a definitive elucidation on the functionality and extensibility of the regulation. Compared to other related regulations, the technical term of the definition is very detailed and universal.

For example, in FAEC, it uses 'information processing system' terminology for data messages⁷¹⁾ which means that any electronic apparatus

or system with an ability to process information(FAEC, Art. 2, (1)), is used in preparing, transmitting, receiving or storing electronic documents(FAEC, Art. 2, (2)). This definition is similar to the definition in MLEC and other electronic transactions act.⁷²⁾

In LEIT there is another detailed definition. It uses 'electronic records' terminology for data messages whereby it means any "Electronic Information that is created, forwarded, sent, received, or stored in analog, digital, electromagnetic, optical form, or the like, visible, displayable and/or audible via computers or electronic systems, including but not limited to writings, sounds, images, maps, drafts, photographs or the like, letters, signs, figures, access codes, symbols or perforations having certain meaning or definition or understandable to persons qualified to understand them(LEIT, Art. 1, (4))."

There is also another exclusive regulation definition in LEIT, where in the information technology, provision of electronic system, electronic system network, computer, access code and electronic contract. This condition, the definition rule related to electronic contract is mentions the considering of legislation rule.⁷³⁾

71) The definition of 'data message' in MLEC, UECIC is used for standardization of profit in comparison to paper based document for mutual understanding and proper regulation purposes. According to various international organizations and the enforcement of Positive law in every country, there are several scopes of regulation related to the definition of data message - 'OECD Guidelines for Cryptography Policy (1997),' Chap. III., 'ICC Supplement to UCP 500 for Electronic Presentation (eUCP),' Art. E3., 'CMI Rules for Electronic Bills of Lading (1990),' Art. 11., UETA, Sec. 2, (7), (13), UCITA, Sec. 102, (28), (54), E-Sign, Sec. 106, (4), UECA, Article 1, (a), 日本電子署名及び認証業務に関する法, 第2條, Malaysia 'Digital Signature Bill (1997),' Art. 2.

72) MLEC, Art. 2, (a), (f), UECIC, Art. 4, (c), (f), UETA, Sec. (7), (11), UCITA, Sec. 102, (28), (36).

73) Under this condition, there are no specific definition for electronic signatures and authentication.

In Chapter 2 of LEIT, even though the application scope and main agent is defined, the content of the regulation is only restricted to qualified parties.

Under 'Principle and Objectives' in Chapter 2, the technological neutrality of the electronic records which is seen in good faith and the legal certainty of electronic transaction usage in relation to electronic transaction is recognized under the analytical and general principles of LEIT.

Under the Electronic Information, Records, Signature in Chapter 3, the juridical obligation, authority of qualified parties and legal binding force of electronic information, electronic records and electronic signature is supplemented by the seriatim explanation and definition. The basis of all content in LEIT is merely based on the 'functional equivalent' approach where traditional paper data messages and electronic data messages have the same function. It is considered to be similar with other related regulations, as well as, MLEC.

In Chapter 5(Electronic Transactions), the general regulation that is related to the electronic transaction is divided into the public and private sector, especially to recognize the legal binding force of electronic contract and the legal position of qualified contract parties. By this, it assures that the appropriate legal binding force can be implemented. If compared with other related regulations, it is seen as taking a major step forward for the legislative regulation in the right direction.

2. The Assessment and Implication related to LEIT's Terminology use

1) Electronic Contract

In LEIT, the analysis tool to compare with another regulation, and the electronic contract content is different. In LEIT, there is electronic contract regulation and appropriate direction but in other regulation, it can not find the appropriate direction.

LEIT defines the electronic contract as “an agreement of parties entered into by means of electronic system(LEIT, Art. 1, (17)).” In addition ‘Electronic System’ means a set of electronic devices and procedures that functions to prepare, collect, process, analyze, store, display, announce, send, and/or disseminate electronic information(LEIT, Art. 1, (5)).

For furthermore, the formation requirement and legal effect of electronic contract is equivalent with the traditional paper based document. The electronic contract is basically any specialized subject matter and also method for forming agreements. Its not only one part but also can be proof and conclude by electronic system and electronic communication method. It is establishing this concept and scope application. In the same purpose⁷⁴⁾, declaratory effect is related to the terminology definition where stand out the legal meaning of the proper function dimension.

Electronic transactions that made in an electronic contract must be conducted in good faith. An Electronic Contract is defined as an agreement between the parties through an electronic system. The parties may choose a law applicable to their electronic contract as well as an alternative dispute settlement method.

74) UN General Assembly A/CN.9/WG.IV/WP 95, para. 10.

2) Electronic System

As mentioned in LEIT, the definition of electronic system, there is special concept related electronic system. The content is defines about provision of electronic system and electronic system network. This regulation also can find only in LEIT as well as electronic contract. It is exclusive definition therefore it can not find in another regulation.

First of all, the 'provision of electronic system' means an electronic system usage by the state administrators, persons, business entities and/or the public(LEIT, Art. 1, (6)). After that 'Electronic System Network' means a closed or open connection of two Electronic Systems or more(LEIT, Art. 1, (7)).

As we see above, there is international commerce that the commerce activities through internet generally amongst merchant where the activities is closed networks. And also there is open network, both of those network is separate. But both of this is electronic communication method and this trend is extending widely.

At the same vision, in LEIT, the reason to regulate this both communication network is in order to secure the faithful of law. As mentioned above, LEIT still more progressive to hitch in development of information and communication technology in this custom field. And by accommodate actively the advance of communication method. The purpose of this regulation is in order to overcome the whole legal harden situation that can be predicted.

Not only in LEIT, the electronic system also use in another regulation with another terminology which is 'information system' terminology. This terminology can be seen in MLEC and UECIC. In MLEC and UECIC,' the information system' means a system for generating, sending, receiving, storing or otherwise processing data messages.⁷⁵⁾

But in the FAEC in Korea and U.S. UETA, UCITA is using 'information processing system' terminology. The difference terminology using is can be seen. In UETA and UCITA, the 'information processing system' means an electronic system for creating, generating, sending, receiving, storing, displaying or processing information.⁷⁶⁾

The differences of 'the information system,' 'information processing system' and 'electronic system' is have the meaning where the system in order to handle creating, sending, receiving, storing and displaying. Actually, the terminology define dimension apparently have no problem but in Korea, the definition of 'information processing system' is more detail. It defines the 'electronic equipment and system' word in the definition content and the concept is clear. If compare with another regulation, this concept is more clearly and measurable and conclude the point of view that the legal vision is step forward in the appropriate dimension.

3) Electronic Agent

Automated message system is common use word but actually is same with electronic agent. In electronic transaction, it using both of this word and they have the same meaning.

All of law also explain automated message system and electronic agent as defined in UECIC, 'Automated Message System' means a computer program or an electronic or other automated means used to initiate an action or respond to data messages or performances in whole or in part, without review or intervention by a natural person each time an action is initiated or response is generated by the system. UECIC, Art. 12., A contract formed by the interaction of an automated message system and a

75) MLEC, Art. 2, (a)., UECIC, Art. 4, (f).

76) UETA, Sec. 2, (11)., UCITA, Sec. 102, (36).

natural person, or by the interaction of automated message systems, shall not be denied validity or enforceability on the sole ground that no natural person reviewed or intervened in each of the individual actions carried out by the automated message systems or the resulting contract.⁷⁷⁾

In short, in international commerce, automated message system and electronic agent is according to data messages include expectation profits of sales of goods contract party and ensure the identity, qualification and eligibility commerce. And in the same time, promote the efficiency of the overall commerce that can improved by the parameters and this trend can be an important role.

In this same condition, related to all international and domestic law, there is a regulation of electronic agent and automated message system and specify requirement and legal effect of electronic agent and automated message system. For example, the positive law of each country and international organization depend on the law regulation is defines clearly the legal effect and responsibility of attribution related to the issue matter of automated transaction, electronic agent, system provider, participate main agent, authentication system and authentication.⁷⁸⁾

After that, in electronic message authentication system practice, there is a realization standard but there is investigation that party autonomy and contract and regulation is having a same effect.⁷⁹⁾

In the same vision in LEIT, related to the electronic agent, it has a clearly rule, it defines the electronic agent as an automated electronic means that is used to initiate an action to certain 'Electronic Information,'

77) UECIC, Art. 4, (g)., Art. 12.

78) MLEC, Art. 13, (2)., UECIC, Art. 4, (g)., UETA, Sec. 2, (6)., UCITA, Sec. 102, (27)., FAEC, Art. 2, (2)., Art. 7, (1).

79) Shim, Chong-Seok, "A Legal Study on The Certificate Systems of Data Messages Under International Commercial Transactions", Korea Management and Law Association, Vol. 14, No. 2, 2004.

which is operated by persons(LEIT, Art. 1, (8)).

The electronic agent that defines in LEIT, this regulation is no limitation and for example related to the electronic authentication and signatures, the electronic certification service provider, electronic system network, electronic contract, those can notice the function as related clause and mutual substitution regulation.

4) Electronic Record

The 'electronic record' terminology is used in LEIT and UETA. Electronic record has the same definition point with electronic document, data message or electronic message. The terminology of 'electronic document' each country is different. In United State uses terminology 'data message' that can be found in MLEC and UECIC, FAEC in Korea are use both terminology 'electronic document and electronic message.' UCITA uses 'electronic message' terminology.

Based on Uniform Computer Information Transaction Act(UCITA), 'electronic message' means a record or display that is stored, generated, or transmitted by electronic means for the purpose of communication to another person or electronic agent(UCITA, Sec. 102, (28)).

In Uniform Electronic Transaction Act(UETA) states that 'Electronic Record' means a record created, generated, sent communicated, received, or stored by electronic means(UETA, Sec. 2, (7)).

The FAEC states that the term of 'electronic document' means any information prepared, transmitted, received or stored in electronic form by the information processing system(FAEC, Art. 2, (1)).

In UNCITRAL Model Law on Electronic Commerce(MLEC) states that 'data message' means information generated, sent, received or stored by electronic, optical or similar means including, but not limited to, electronic

data interchange(EDI), electronic mail, telegram, telex or telecopy(MLEC, Art. 2, (b)).

United Nations Convention on the Use of Electronic Communications in International Contracts(UECIC) also states that '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(UECIC, Art. 4, (c)).

In LEIT 'electronic record' means any Electronic Information that is created, forwarded, sent, received, or stored in analog, digital, electromagnetic, optical form, or the like, visible, displayable and/or audible via Computers or Electronic Systems, including but not limited to writings, sounds, images, maps, drafts, photographs or the like, letters, signs, figures, Access Codes, symbols or perforations having certain meaning or definition or understandable to persons qualified to understand them(UECIC, Art. 1, (4)).

In contrast with MLEC and UECIC, in LEIT, the electronic record is makes the data message in law standard and the characteristic of LEIT in electronic record⁸⁰⁾ definition where it connected with electronic information and computer.

In this case, the unique thing is the terminology related to the 'computer.' There is maintaining with the regulation especially the definition where the content is the integration by an electronic, magnetic, optical data processing device, or a system that performs logic, arithmetic and storage functions(UECIC, Art. 1, (6)). In LEIT, there is a function as

80) UECIC, Art. 1, (4): Electronic Record means any Electronic Information that is created, forwarded, sent, received, or stored in analog, digital, electromagnetic, optical form, or the like, visible, displayable and/or audible via Computers or Electronic Systems, including but not limited to writings, sounds, images, maps, drafts, photographs or the like, letters, signs, figures, Access Codes, symbols or perforations having certain meaning or definition or understandable to persons qualified to understand them.

supplement regulation of defined electronic record.

5) Electronic Transaction

In Indonesia LEIT, it not only defines the definitions in electronic information and transaction but also specify the 'transaction'⁸¹⁾ in electronic transaction chapter 5.

This law defines 'electronic transaction' as a legal act that is committed by the use of computers, computer networks, and/or other electronic media(UECIC, Art. 1, (2)).

Concern to the definition, in MLEC also defines the 'commerce' and 'commercial activities' in Art. 1(sphere of application). In the other hand, in the FAEC, the definition of related regulation is defines in Art. 2, (5) 'electronic transactions' and in the Consumer Protection Act on Electronic Commerce in Art. 2, (1).⁸²⁾

In MLEC, it expresses the 'commerce' in the situation where there is no exclusion of consumer protection in cancellation of legal provision⁸³⁾. And

81) Transaction mean: 1. An act of carrying out some form of business between two persons; 2. A business agreement or exchange; 3. Any activity in which two or more persons are involved.

82) In the Framework Act on Electronic Commerce, it brings in the equal meaning of electronic transaction and electronic commerce in legal provision. In the Framework At on Electronic Commerce, it defines the meaning of electronic transaction in article 2 (5) where "electronic transactions" means any transaction of which the whole or part of goods or service is made through electronic documents in transacting goods or service. And in the Consumer Protection Act on Electronic Commerce defines 'electronic commerce' where means to carry out commercial activities by means of electronic transactions (E-commerce means the electronic transaction under the provisions of the Paragraph 5 Article 2 of the FAEC). The definition of electronic commerce in Consumer Protection Act on Electronic Commerce, it seems that it also defines the commercial activities.

83) UNCITRAL, 「UN Publication Sales No.: E99.V4」 (ISBN92-1-133607-4), p.3, ****.

there is a limitation in 'commercial activities' scope application compare to LEIT. In LEIT related to the consumer transaction and public sector until civil activities, it can identify the differences and extend the application scope.⁸⁴⁾

If we compare both of this Korean law that mentioned above, we can see that the explanation of FAEC has a clearly specific meaning, it more concerns the taking a major step forward of legislation rule. LEIT mentions explicit comprehensive related to civil activities. Above of all law application, the scope application related to 'electronic transaction' and 'electronic commerce,' notionally it specifies definite division and stand out the proper regulation legislation benefit in purpose.

According to LEIT, it supplements the legal meaning in expanding purposes that include the civil activities and follow with domestic transaction. Of course related to the commercial activities to application object, as main agent in transaction activities not only merchant but also until common customer.

Finally, in LEIT, it enlarges the prospect until the civil activities and trading activities in the scope application. And in the same time, it assort clearly the 'electronic transaction' and 'electronic commerce.' In the sight of comprehensive application object, compare to the limitation of international activities in the MLEC, it holds on to the extension sight. Compare to the Framework Act on Electronic Commerce and related law, it covers the object obviously specific and LEIT standing out the legal definition term in enactment purposes. This can be seen in LEIT start from chapter 6(domain names, intellectual property rights and protection of privacy rights) and chapter 9(role of the government and role of the public) is the supplement for chapter 5.

84) LEIT, Art. 1, (21)., "Person means an individual, whether an Indonesian citizen, foreign citizen, or legal entity."

6) Electronic Signatures

The electronic Signature is explained in LEIT in General Provision part, (Art. 1, (12)) means a signature that contains Electronic Information that is attached to, associated or linked with other Electronic Information that is used for means of verification and authentication(LEIT, Art. 1, (12)). Electronic signature is equivalent with manual signature which mean they have the same legal effect in legal binding.

The regulation that related to electronic signature is regulated inside LEIT. There is no independent law of signature in LEIT. All is included under LEIT. This is what makes different with electronic signature act in Korea. In Korea, the law that related to electronic signature is called Korea Digital Signature Act(DSA) is independent. It has it own regulation which is separate with the FAEC. It is not included inside FAEC.

Beside that, 'electronic signature' terminology is using LEIT. But in Korea, the electronic signature terminology that used is 'Digital Signature.'

Republic of Korea Digital Signature Act defines 'digital signature' means a piece of information in digital form affixed on, or logically combined to, an electronic message in order to identify the signer and verify that the electronic message has been signed by that signer(DSA, Art. 1, (3)).

The scope application of digital signature act is more specific than electronic message. Digital signature is a part of electronic signature that using cryptographic technique. Cryptographic techniques can be used to provide encryption for confidentiality and electronic signature can provide authentication and integrity of communications. There are 2 basic types of cryptographic encryption: symmetrical and asymmetrical and many different coding mechanisms. Some are general purposes whilst others are targeted at specific business problems. All is require a specific key to encrypt and decrypt a message. Symmetrical system, where the same key is used to

encrypt and decrypt data is a term of a 'private key system.' An asymmetrical system uses one key to encrypt data and another to decrypt it. This term is a 'public key system.'

The Korea Digital Signature Acts is more detail and focus than Indonesia's Electronic Information and Transactions Law. But if there any technologies improvement then the Digital Signature Act has to renew and the opposite for Indonesia Electronic Signature Law, it does not need to renew because the electronic signature that explain in LEIT is based on neutrality principle.

For electronic signatures law in Indonesia, it did not explain clearly about the law procurement. It explains too general and broadly because it using 'technological neutrality.' With this condition, Indonesian electronic law still gives some space for fraudulence.

3. The Assessment and Implication related to LEIT's General Provisions

1) General Principles and Objectives

In chapter 2 of LEIT, in the scope applications, it specifies the general principles and it also mention that the regulation is exclusive and independent and at the same time, the position of the possess regulation that put on the whole law.

For example, in Art. 3 of LEIT, electronic transaction usage that related to information technology and electronic transaction, declares that information technology and electronic transaction usage shall be implemented under the principles of legal certainty, benefit, prudence, good faith, and freedom to choose technology or technological neutrality.

Related to the interpretation and scope of LEIT, it applies all, for

example the possibility for general principles. According to the legal rule, inherently LEIT defines the prospect that LEIT until international transaction. The definition can be analogized in purpose part. For the detail explanation of general principles, it states in footnote as below.⁸⁵⁾

2) Time of Sending and Time of Receipt of Electronic Documents

LEIT consistently defines the 'Time of Sending' and 'Time of Receipt' of electronic record in Art. 8. The content is clarified by basic principles of receipt rule. LEIT consistently defines the 'Time of Sending' and 'Time of Receipt' of electronic records in Art. 8. The content is clarified by basic principles of receipt rule.⁸⁶⁾ Receipt rule means that the legal effect is

85) LEIT, Elucidation of Art. 3, (a), Principle of benefit means a principle that Information Technology and Electronic Transaction usage shall be attempted to support the process of using information in order to enable improvement of public welfare, (b), Principle of prudence means a foundation on which the parties concerned must address themselves to any aspect with potential for causing damage to both himself/herself and other party in the usage of Information Technology and Electronic Transactions, (c), Principle of good faith means a principle that parties to an Electronic Transaction shall not aim at knowingly, without authority or unlawfully causing damage to other parties without the other parties' knowledge, (d), Principle of freedom to choose technology or technology neutrality means a principle that the usage of Information Technology and Electronic Transactions shall not focus on the use of certain technology in order to follow the development of future technology.

86) LEIT, Art. 8, (1), Unless agreed otherwise, time of sending of Electronic Information and/or Electronic Records shall be determined at the time the Electronic Information and/or Electronic Records have been sent to the proper address by the Senders/Originators to Electronic Systems the Recipients/Addressees designate or use, and have entered Electronic Systems outside the control of the Senders/Originators. (2), Unless agreed otherwise, the time of receipt of Electronic Information and/or Electronic Records shall be determined at the time the Electronic Information and/or Electronic Records enter Electronic Systems under the control of the authorized Recipients/Addressees. (3), Where Recipients/Addressees have designated certain

effective when the electronic record is received by the party. If it compares to other law, there is no special differences. The time of sending and time of receipt is different. The case that has to keep in view in LEIT is in the time of sending and time of receipt situation where when each of receiver enter to the communication in electronic system and enter to the availability of access and sometimes under controlling.

IT seems that this proper regulation is according to the definition of electronic signature and according to electronic certificate, there is a limit regulation of qualified party and the choice of reliable information system and add up more responsibility of receiver related to usage.

3) Documentation of Electronic Record

In electronic contract, legally the electronic record have the same legal effect with paper based record. For this, to satisfy the requirement, there are several requirement as following:

First, according to electronic record, the different of record and content is they do not have a same judgement with paper based record but it only different in the delivery method. Also in the legal ways there is nothing changes. It means that even the delivery method is different they still have an equal legal effect.⁸⁷⁾

In MLEC also mentioned that this model law is adopts a 'functional

Electronic Systems to receive Electronic Information, reception shall occur at the time Electronic Information and/or Electronic Records enter designated Electronic Systems. (4)., Where there are two or more information systems used in the sending or reception of Electronic Information and/or Electronic Records, then: (a). the time of sending shall be the time when Electronic Information and/or Electronic Records enter a first information system outside the control of the Senders/ Originators. (b). the time of receipt shall be the time when Electronic Information and/or Electronic Records enter a last information system under the control of the Recipients/Addressees.

87) 八尾晃, 「貿易. 金融の國際取引: 基礎と展開」, 東京經濟情報出版, 2001, p.63.

equivalence approach' to dealing with electronic commerce. This approach is based on analyzing the purposes and functions of paper based requirements and determining how those purposes and functions can be fulfilled through electronic commerce techniques.

In electronic record, the party that related to electronic record have to able to access the content, record and information that admitted in electronic record.⁸⁸⁾

This electronic record has the possibility to maintain and preserve. In addition, if there is any difference with the condition between the parties, even through the special contract, it has to guarantee the thing that can not be eliminated.⁸⁹⁾

Related to that, in LEIT, it defined in chapter 3. The content has no differences with the above content. The main points are as following:

First, because of the electronic form in the electronic record, it can not be denied the legal effect. (Art. 6).

Second, the electronic record is equivalent with paper-based document (Art. 5 (3)).

Third, the electronic records shall be lawful means of proof.(Art. 5).

88) MLEC, Art. 6, (1): Where the law requires information to be in writing, that requirement is met by a data message if the information contained therein is accessible so as to be usable for subsequent reference, UECIC, Art. 9, (2)., 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.

89) MLEC, Art. 5, *bis*: Information shall not be denied legal effect, validity or enforceability solely on the grounds that it is not contained in the data message purporting to give rise to such legal effect, but is merely referred to in that data message, UECIC, Art. 8, (1)., A communication or a contract shall not be denied validity or enforceability on the sole ground that it is in the form of an electronic communication, (2)., Nothing in this Convention requires a party to use or accept electronic communications, but a party's agreement to do so may be inferred from the party's conduct.

Each regulation, the legal recognition of data messages and writing also defined in MLEC, (Art. 5~6). And also there is legal recognition of electronic communications in UECIC, (Art. 8 (1)). In UETA, Sec. 7 there is legal recognition of electronic records, electronic signature and electronic contracts and UCITA, Sec. 107 defines the legal recognition of electronic records and authentication; use of electronic agent. In FAEC , (Art. 4 (1)), have the same regulation.

4) General Provision of Electronic Transaction

The general provisions of electronic transaction in LEIT is defined in Chapter 5 from Art. 17~Art. 22.

Above all, the scope of electronic transaction is divided into public and private scope. This regulation is involve civil and commerce activity and there is no difference.⁹⁰⁾ The detail explanation of LEIT Art. 17 is emphasis that this law allows the opportunities of the information technology usage to state administrators, persons, business entities and/or the public. And also the information technology usage must be implemented in a proper, responsible, effective and efficient manner in order that the public able to reap as much as benefits as possible.

In addition, the Electronic Transactions that are stated in Electronic Contracts shall bind on parties and Parties shall have the power to choose law applicable to international Electronic Transactions they enter. And if parties do not make choice of law in international Electronic Transactions, the applicable law shall be under the principles of the Private International Law.⁹¹⁾

90) LEIT, Art. 17, (1): "Provision of Electronic Transactions may be carried out within a public or private scope."

91) LEIT, Art. 18, (1): Electronic Transactions that are stated in Electronic Contracts shall bind on parties, (2) Parties shall have the power to choose law applicable to

In the other hand, the sending and receiving time of transaction in LEIT is based on basic principles of receipt rule where means that the sending and receiving time of transaction in the electronic transactions should be occur at the time where the transaction offers sent by the senders/originators have been receive and accepted by recipients/addressees.

Meanwhile in Art. 21 and Art. 22 is regulates the content related to the legal effect in conduct and qualified requirement and legal responsibility of the electronic agents. And the main points of this law are reliable and there is no contradiction with other laws. Besides that, related to the responsibility of electronic agents is defined clearly. Above content if it compares with another law there is no difference.

5) The Formation Requirement of Electronic Contract

The electronic contract regulation is defined in Art. 1, (17) in LEIT. There is exception for UECIC because the effect of signing contract, formation requirement of electronic contract, legal effect of acceptance and offer is only defined in UECIC. LEIT only defines the definition of electronic contract as mentioned above in Art. 1, (17). It did not explain in detail as UECIC did.

UECIC define in detail in Art. 11 related to invitations to make offers

international Electronic Transactions they enter, (3) If parties do not make choice of law in international Electronic Transactions, the applicable law shall be under the principles of the Private International Law, (4) Parties shall have the powers to determine forums of court, arbitration, or other alternative dispute resolution institutions with jurisdiction to handle disputes that may arise from international Electronic Transactions they enter, (5) If parties do not make choice of forum as intended by section (4), the jurisdiction of court, arbitration, or other alternative dispute resolution institution with jurisdiction to handle disputes that may arise from such transactions shall be determined under the principles of the Private International Law.

and in Art. 12 related to use of automated message systems for contract formation and also in Art. 13 is related to availability of contracts term. In LEIT there is no such explanation. Therefore, this is a defection for LEIT related to electronic transaction.

The detail explanation related 'invitations to make offers' in Art. 11 UECIC is "A proposal to conclude a contract made through one or more electronic communications which is not addressed to one or more specific parties, but is generally accessible to parties making use of information systems, including proposals that make use of interactive applications for the placement of orders through such information systems, is to be considered as an invitation to make offers, unless it clearly indicates the intention of the party making the proposal to be bound in case of acceptance(UECIC, Art. 11)."

The content of "use of automated message systems for contract formation" in Art. 12 UECIC is "A contract formed by the interaction of an automated message system and a natural person, or by the interaction of automated message systems, shall not be denied validity or enforceability on the sole ground that no natural person reviewed or intervened in each of the individual actions carried out by the automated message systems or the resulting contract(UECIC, Art. 12)."

The content of availability of contract terms is "Nothing in this Convention affects the application of any rule of law that may require a party that negotiates some or all of the terms of a contract through the exchange of electronic communications to make available to the other party those electronic communications which contain the contractual terms in a particular manner, or relieves a party from the legal consequences of its failure to do so(UECIC, Art. 13)."

6) Validity Requirement of Electronic Contract

As we know that the recognition of electronic contract by LEIT is stated in Art. 1, (7) where means an agreement of parties entered into by means of into by means of electronic systems.⁹²⁾ Thus, the thing that makes difference between electronic contract and conventional contract is only the device. The electronic contract is using electronic system.

In the other hand, the validity of electronic contract in LEIT is stated expressly in Art. 5, (3) where it states that 'Electronic Information and/or Electronic Records shall be declared to be lawful if using Electronic Systems in accordance with provisions as governed by this Law(LEIT, Art. 5, (3)).' It states expressly that the electronic document is valid if it using electronic system has been certified as stated in chapter four, Art. 13~16 in LEIT. The chapter four of LEIT is related to the provision of electronic certification and electronic systems.⁹³⁾

92) LEIT, Art. 1, (5), 'Electronic Systems' means a set of electronic devices and procedures that functions to prepare, collect, process, analyze, store, display, announce, send, and/or disseminate Electronic Information.

93) LEIT, Art. 13: (1) Any Person shall be entitled to engage the service of Electronic Certification Service Providers for creating Electronic Signatures, (2) Electronic Certification Service Providers must confirm the attribution of an Electronic Signature to the owner, (3) Electronic Certification Service Providers shall include: a. Indonesian Electronic Certification Service Providers; and b. foreign Electronic Certification Service Providers, (4) Indonesian Electronic Certification Service Providers shall be an Indonesian legal entity and domiciled in Indonesia, (5) Foreign Electronic Certification Service Providers that operate in Indonesia must be registered in Indonesia, (6) Further provisions on Electronic Certification Service Providers as intended by section (3) shall be regulated by Government Regulation. Art. 14: Electronic Certification Service Providers as intended by Article 13 section (1) through section (5) must make available to any service user accurate, clear, and definite information that includes: a. methods that are adopted to identify the Signatories/Signers, b. things that can be used to recognize Electronic Signature-creation personal data, c. things that can demonstrate the

The electronic certification regulation is needed to prevent the related party to do any fraudulence related to electronic contract. It is one of security way for electronic contract.

Compare to LEIT, the FAEC is explains the validity and the requirement of electronic contract more detail and specific than LEIT. It can be seen in Art. 4⁹⁴⁾ and 5⁹⁵⁾. The Art. 4 is explains the validity of electronic

validity and security of Electronic Signatures. Art. 15: (1) Any Electronic System Provider must provide Electronic Systems in reliable and secure manner and shall be responsible for the proper operation of the Electronic Systems, (2) Electronic System providers shall be responsible for their Provision of Electronic Systems, (3) The provision as intended by section (2) shall not apply where it is verifiable that there occur compelling circumstances, fault, and/or negligence on the part of the Electronic System users. Art. 16: (1) To the extent not provided otherwise by separate laws, any Electronic System Provider is required to operate Electronic Systems in compliance with the following minimal requirements: a. can redisplay Electronic Information and/or Electronic Records in their entirety in accordance with the retention period as provided for by Laws and Regulations, b. can protect the availability, entirety, authenticity, confidentiality, and accessibility of Electronic Information in the Provision of Electronic Systems, c. can operate in compliance with procedures or guidelines for the Provision of Electronic Systems, d. are furnished with procedures or guidelines that are announced with languages, information, or symbols that are understandable to parties attributed to the Provision of Electronic Systems, and e. adopt sustainable mechanism in order to maintain updates, clarity, and accountability for the procedures or guidelines.

94) FAEC, Art. 4: (1) An electronic document shall not be denied its validity only because it takes an electronic form, except as otherwise provided for in any other Acts. (2) Where any activity to record, report, deposit; keep or prepare, etc. under the provisions of Acts as provided for in the attached Table has been made by electronic documents, it shall be deemed that activities under the relevant Acts have been conducted.<Newly Inserted by Act No. 7440, Mar. 31, 20(b>

95) FAEC, Art. 5: (1) In cases where electronic documents meet the following requirements, the custody of such electronic documents may take the place of the custody of documents prescribed by the relevant Acts and subordinate statutes: 1. Details of electronic documents shall be offered for public perusal; 2. Electronic documents shall be preserved in the form when prepared, transmitted or received, or in the form

documents and the Art. 5 is explain the custody of electronic documents. The electronic document should satisfy the requirements to take the place of the custody of documents.

7) Validity Requirement of Electronic Signature

In LEIT, there are several requirements that have to be fulfilled for creating the validity of electronic signatures. The requirement is mentioned in Art. 11 that electronic signatures shall have lawful legal force and legal effect to the extent satisfying the following requirements(LEIT, Art. 11, (1)):

(a) Electronic signature creation data shall be associated only with the signatories/ signers; (b) Electronic signature-creation data at the time the

reproducible same as such; 3. In cases where matters concerning an originator, an addressee and the time of transmission or receipt of electronic documents are included therein, such parts shall be preserved. (2) In cases where documents converted to a form that may be processed by the information processing system (hereinafter referred to as 'electronic documents') from paper documents or other documents not prepared in the electronic form (hereinafter referred to as "documents subject to conversion to electronic documents") meet the following requirements, the custody of such electronic documents may take the place of the custody of documents prescribed by the relevant Act and subordinate statutes: Provided, That the same shall not apply to a case where special provisions exist in other Acts and subordinate statutes:<Newly Inserted by Act No. 8461, May 1Z 2007>, 1.Details and form of electronic documents shall be identical to those of documents subject to conversion to electronic documents; and 2. Electronic documents shall meet each requirement set out in the subparagraphs of paragraph (1). (3) Requirements for identity of details and form of electronic documents and documents subject to conversion to electronic documents under paragraph (2), method of and procedure for preparation of electronic documents and other necessary matters shall be determined and publicly announced by the Minister of Knowledge Economy.<Newly Inserted by Act No. 8461, May 17, 2007; Act No. 8852, Feb. 29, 2008>. (4) In the application of paragraphs (1) and (2), parts only necessary for transmission or receipt may not be deemed to be electronic documents or documents converted to electronic documents.<Amended by Act No. 8461, May 17, 2008>

electronic signing process shall be only in the power of the signatories/signers; (c) Any alteration in electronic signatures that occur after the signing time is knowable; (d) Any alteration in electronic information associated with the electronic signatures after the signing time is knowable; (e) There are certain methods adopted to identify the identity of the signatories/signers; and (f) There are certain methods to demonstrate that the signatories/signers have given consent to the associated electronic information.

Based on above, we can see that LEIT is giving the definite recognition that despite it is a codes, this electronic signatures till have an equal position in legal force and legal effect with the manual signatures in general.

And this requirement is the minimum requirement that have to be satisfied in the validity of electronic signatures. LEIT also states that this law is give the broad opportunities to anyone to develop the methods, techniques or process to create electronic signatures.

Therefore it can be concluded that the electronic signatures will have the same legal effect and have lawful legal force with conventional signatures if only the electronic signatures has fulfilled the requirements that stated in Art. 11 in LEIT. If the electronic signatures did not fulfill the requirements that stated in Art. 11 LEIT then the electronic signatures is has no legal effect and legal force, its not valid.

Chapter V. Summary and Conclusion

As one of the forerunners of online security, LEIT in Indonesia has greatly enabled online users to trade safely. Its reliability and legal binding forces has helped Indonesia to become one of the safest country to trade, not only in real life, but online as well. Therefore, in comparison with Korea's FAEC, there are still some leverages that can be acquired from it.

First, compared to other countries' regulations, LEIT is enacted later in 2008, therefore it is enacted later than other countries, thus it is more comprehensive and flexible. It has become the strong point for LEIT.

Second, the scope application and definition terminology in LEIT is very broad and extensive.

Third, in relation to the electronic system, its extensibility and scope of application and included object is elastic for the application than other regulation.

Fourth, the scope of sending and receiving in regard to electronic information transaction, network and information processing system is not limited. In addition, amongst the cluster themselves, it is extensible and nowadays according to the development of information communication technology, it is legal, safe and secure.

Fifth, considering the legal function and extensibility, the terminological definition of LEIT is very detail and broad.

Sixth, as to the electronic contract, it has a legally binding force and it secures the legal position of qualified contract parties, which guarantees the function of proper legal binding force.

Seventh, only LEIT is independent and exclusive. It defines information technology, general principles of electronic system, electronic system network, computer, access code and electronic contract.

Eighth, the application scope of electronic transaction can be civil and a

commercial activity. This vision is broader and covers the application's object. This is a remarkable legal meaning in the enactment purposes of LEIT.

Ninth, when it comes to electronic transaction, it secures the principle of the contract party's autonomy.

Tenth, the strength of Indonesia's electronic signature is when there is a development of electronic methods, techniques or process for creating electronic signatures, Indonesia does not need to change the present law. Furthermore, the usage of 'Electronic Signature' in LEIT as a terminology due to the principles reflects neutrality as stated in Art. 3 'Information technology and electronic transaction usage shall be implemented under the principles of legal certainty, benefit, prudence, good faith and freedom to choose technology or technology neutrality(LEIT, Art. 3), this means that the technology is always improving and provide better service for electronic signature users.

Even though LEIT provides strategic advantages for Indonesia's online trade and commerce, it is not without its weaknesses as well. As compared to Korea's FAEC, LEIT is not as safe and legally binding. Hence, users are more susceptible to fraudulence, thus making their online experience insecure and unsafe.

First, the explanation of LEIT is too general, therefore it would become a target for the occurrence of fraud.

Second, as the requirement formation of electronic contract, there is no regulation in LEIT related to the legal effect and the binding force of the offering and acceptance in contract signing.

Third, by reason of the broader and extensibility of legal composition, therefore lower rank and related laws have to revised and amended.

Fourth, the electronic signatures and electronic authentication regulation, there is no separate or independent regulation. Both of these laws are

included in LEIT, thus it predicts that the application of law is not clear and it will be a obstacle for the user. For the electronic signature law in Indonesia, the explanation on the law's procurement was too general and broad because it was only defined in Art. 11 and 12(LEIT, Art. 11~12). Due to this fact, Indonesian electronic law might allow the opportunity for fraudulence to take place. Therefore, as mentioned before, it will be beneficial if the electronic signature law is explained more clearly and specifically. A more specific law is safer and more reliable to protect users.

Fifth, private information security, intellectual property rights and domain name in this regulation content is too broad, it embraces in one law.

When comparing LEIT to FAEC, there are several implications:

First, in regard to the electronic transaction and electronic commerce, it is not necessary to separate the two.

Second, in the FAEC, there is no separate regulation related to electronic agent and automated messages system as both of these regulations are included inside the scope of information processing system.

Third, in FAEC, it secures the equivalent function of data message. In the event that it needs the requirement of data message with other law then it needs to add the limitation requirement in the authentication application.

Fourth, for the equivalent function of data message, if FAEC is applied internationally, the supplemental regulation and form requirement of limitation requirement is insufficient.

Fifth, the effect of information processing system and automated message system is very clearly shown in the electronic installation and system.

Sixth, in FAEC there is no special regulation in relation to the creator, creator agent or the required definition of sender and automated system. Therefore, there are limitations and can not apply in the regulation of data message.

Finally, it hopes that the result of this research could give the contribution for the future references for Electronic Commerce Law's development in Indonesia and Korea.

References

■ Books

- Adolf. Huala, *Hukum Ekonomi Internasional Suatu Pengantar*, Jakarta: PT. Raja Grafindo Persada, 2005.
- A.Garner, Bryan., *Black's Law Dictionary*, West Thomson Reuters Business, Ninth Edition, 2009.
- Baggy, John., *E-Commerce Law Issues for Business*, Thomson South Western West, 2003.
- Chong-Seok, Shim, *et al.*, *Understanding Electronic Commerce Law & Practice*, Chunggrim Publication, 2001.
- E. Turban, J. Lee, D. King and H.M. Chung, *Electronic Commerce: A Managerial Perspective*, Prentice Hall, 1999.
- Forder Jay., & Quirk Patrick, *Electronic Commerce and the Law*, John Wiley & Sons Australia, Ltd, 2001.
- Gifis S., *Law Dictionary*, Barron's Educational Series, 1996.
- M. Leroy, Roger., & A.Jentz, Gaylord, *Law for E-Commerce*, Thomson South Western West, 2002.
- Oh, Won Seok., *UN Uniform Sales Act*, Trans., Sam-Young Publication, 2003.
- P. Timmers, *Electronic Commerce-Strategies and Models for Business-to-Business Trading* John Wiley & Sons, 2000.
- Turban, Efrain., King, David., & Lang, Judy., *Introduction to Electronic Commerce*, Prentice Hall, 2010.
- Watson, Richard T., Berthon, Pierre., Pitt, Leylan F., & Zinkhan, George M. *Electronic Commerce: The Strategic Perspective*, Creative Commons Attribution 3.0 License, 2008.

■ Researches

- Andam, Zorayda Ruth., "E-Commerce and E-Business", *e-ASEAN Task Force UNDP-APDIP*, 2002.
- Anil, Samtani., "Electronic Commerce in Asia: The Legal, Regulatory and Policy Issues", *International Journal of Law and Information Technology*, Vol.9, No.2, 2001.
- Boss, Amelia H., "Electronic Contracting: Legal Problem or Legal Solution?", *Yale Journal of International Law* 28, 2004.
- Bons, Roger W.H., et al., "Implementing International Electronic Trade Using Open EDI", *Erasmus University Research Institute for Decision and Information Systems*, 1996.
- Bowman, "The Uniform Computer Information Transactions Act: A Well Built Fence or Barbed Wire Around The Intellectual Commons?", *LBJ Journal of Public Affairs*, Vol.VIII, Spring, 2001.
- Davias, Alysia., "The Development of Laws on Electronic Documents and E-Commerce Transactions", *Parliamentary Information and Research Service*, 2008.
- Djajusman, Darmawan., "Investment Policy and Opportunities in Indonesia", *Indonesia Investment Coordinating Board of Republic Indonesia*, Sept, 2011.
- Garret, S.G.E. Skevington, P., "An Introduction to eCommerce", *Journal of BT Technology*, Vol.17, No.3, 1999.
- Grier, et al., "Uniform Computer Information Transactions Act: Bringing Commercial Law into the 21st Century", *RICH. J.L. & TECH*, Vol.8, No.1, 2001.
- Grijpink J., "New Rule for Anonymous Electronic Transaction: An Exploration of The Private Law Implications of Digital Anonymity", *Journal of Information, Law and Technology (JILT)*, Vol.9, No.3, 2001.

- Grainger, Andrew, "A Paperless Trade and Customs Environment in Europe: Turning Vision into Reality", *A EUROPRO Paper*, 2004
- Ghafur Hamid, Abdul. Maung Sein, Khin, "The Legal Implications of Electronic Bills of Lading: How Imminent is The Demise of Paper Documents?", *Journal of the Malaysian Bar*, Vol.33, No.3, 2004.
- Handayani, Tutwuri, "Acknowledgement of Signature on an Electronic Document in the Legal Authentication According to the Civil Procedural Code in Indonesia", The Graduate School of Diponegoro University, *Master Program Thesis*, 2009.
- Hawksworth, John. Tiwari, Anmol., "The World in 2050: The accelerating shift of global economic power: challenges and opportunities, Pricewaterhouse Coopers Report, January, 2011.
- Heng, Michael S.H., "Understanding Electronic Commerce from A Historical Perspective", *Communications of the Association for Information Systems Journal*, Vol.12, 2003.
- Kantaatmadja, Mieke Komar., "Pengaturan Kontrak untuk Perdagangan Elektronik (e-Contract)", *dalam Seri Dasar Hukum Ekonomi 12 – Cyberlaw: Suatu Pengantar*, Cetakan I, Jakarta, Elips II, 2002.
- Katsh, Ethan, et al., "E-Commerce, E-Dispute, and E-Dispute Resolution: on the Shadow of E-Bay Law", *Ohio State Journal on Dispute Resolution*, Vol.15, 2000.
- Kelly, Dominic, "The International Chamber of Commerce", *New Political Economy*, Vol. 10, No. 2, 2005.
- Lassman, Kent., "Contracts and Electronic Commerce: The Uniform Computer Information Transaction Act (UCITA)", *Periodic Commentaries on Policy Debate*, January, 2007.
- Mrkonjic, Lee., "What is EDI and How does it Work?", *B2B Series Whitepaper*, 2009.
- Natelson, Robert. G., "The legal Meaning of "Commerce" in the Commerce

Clause”, *CP_Natelson*, 2006.

Oh, Hyon-Sok., “A Study on Some Problems of The Electronic Certification in International Electronic Commerce”, The Graduate School of Sung Kyun Kwan University, *Master Program Thesis*, 2003.

Orpwood, Ruth., “Electronic Contracts: Where We’ve Come From, Where We Are, and Where We Should Be Going”, *International In-house Counsel Journal*, Vol. 1, No. 3, Spring, 2008.

Pagnoni A. Visconti A., “Secure Electronic Bills of Lading: Blind Counts and Digital Signatures”, *Journal of Electronic Commerce Research*, Vol.10, No.3-4, 2010.

Ramberg C., “Electronic Commerce in The Context of the European Contract Law Project”, *Journal of ERA-Forum*, Vol.7, No.1, 2006.

Ritter, Jeffrey B. Gliniecki, Judith Y., “International Electronic Commerce and Administrative Law: The Need for Harmonized National Reforms”, *Harvard Journal of Law & Technology*, Vol.6, Spring Issue, 1993.

Shim, Chong-Seok., “A Legal Study on The Law of Electronic Information and Transactions in Indonesia: Focused on The Definitions and General Provision”, *Korea Internet e-Commerce Research*, Vol.10, No.4, 2010.

_____, “A Study on The Legal Interpretation and Application for UN Convention on The Use of Electronic Communications in International Contracts”, *The Journal of Korea Research Society for Customs*, Vol.11, No.1, 2010.

_____, “A Legal Study on Complimentary Issues of Electronic Commerce Act in Korea”, *Korea Internet e-Commerce Research*, Vol.9, No.3, 2009.

_____, “A Study on The Formation of Contractual Usage in Electronic Commerce and Its Legal Efficiency”, *Korea Internet e-Commerce*

- Research*, Vol.2, No.1, 2002.
- _____, "A Study on The Improvement in Legal Issues for Related Electronic Signatures Acts in Korea: Focusing on The Legal Issues Connected with e-Signature and e-B/L", *Korea Internet e-Commerce Research*, Vol.10, No.2, 2010.
- _____, "A Legal Study on The Certificate Systems of Data Messages Under International Commercial Transactions", *Korea Management and Law Association*, Vol.14, No.2, 2004.
- _____, "A Comparative Study on The Performance of Contract and Terms in Computer Information Transactions", *Korea Trade Review*, Vol.31, No.5, 2006.
- _____, "A Study on The Valuation for UN Convention on The Use of Electronic Communications in International Contracts", *e-Business Association*, Vol.9, No.4, 2008.
- Smedinghoff, Thomas J., "The Legal Challenges of Implementing Electronic Transactions", *Uniform Commercial Code Law Journal*, Vol.41, No. 1, 2008.
- Swire, Peter P., "Trustwrap: The Importance of Legal Rules to Electronic Commerce and Internet Privacy ", *Hasting Law Journal*, Vol.54, 2003.
- Victory, Nancy J., et al., "Electronic Signatures: A Review of the exceptions to the Electronic Signatures in Global and National Commerce Act", *U.S Department of Commerce National Telecommunications and Information Administration*, 2003.
- Winn, Jane K., "The emerging Law of Electronic Commerce", *Business Lawyer*, Vol. 52, August, 1997.
- _____, "Is Electronic Contracting Different? Contract Law in The Information Age", *Economic Analysis*, 2004.
- _____, " Emerging Issues in Electronic Contracting Technical Standards and law Reform", *Rev. dr. unif.*, 2002.

Xu, lai. Vrieze, Paul de., "E-contracting Challenges", *Journal of European Communities*, 2010.

八尾晃, 貿易・金融の国際取引：基礎と展開, 東京経済情報出版, 2001.

■ Websites

「www.aseankorea.org」

「www.aseanlawassociation.org/docs/w5_indo1.pdf」

「www.bps.go.id/65tahun/booklet_Agustus_2010.pdf」

「www.comitemaritime.org」

「www.dgs.ca.gov」

「www.hukumonline.com」

「www.iccwbo.org」

「www.indonesia.go.id」

「www.indonesia.sk/trade/2010/2010-invest-in-indonesia.pdf」

「www.kadin-indonesia.or.id」

「www.kemlu.go.id」

「www.korea-law.org」

「http://www.koreatimes.co.kr/www/news/special/2011/10/275_46000.html」

「www.law.upenn.edu/blj/archieves/ulc/ecom/ueta_final.pdf」

「www.ncsl.org」

「www.nccusl.org/nccusl/ucita/UCITA_Summary.pdf」

「www.oecd.org」

「www.pwc.co.uk/economics」

「www.researchandmarkets.com」

「www.spamlaws.com」

「www.thejakartapost.com」

「www.uncitronline.com」

「www.unictral.org/pdf/english/texts/electcom/06-57452_Ebook.pdf」

「www.unictral.org/pdf/english/texts/electcom/05-89450_Ebook.pdf」

「www.uncitral.org/pdf/english/texts/electcom/ml-elecsig-e.pdf」

「www.unidroit.org/english/home.htm」

「www.unidroit.org/english/members/main.htm」

「www.unilex.info」

「www.worldmaritime.net」

인도네시아 전자정보거래법에 대한 법적 비교 연구

- 정의 및 일반 규정을 중심으로 -

야뻬 크리스티나

대구 대학교 대학원
석사 과정 무역 학 과

지도교수 심종석

(초록)

인도네시아는 총인구 5억의 AFTA의 주도국으로서 역내 회원국을 비롯하여 미국, EU, 한국, 대만 등 무역 및 투자 관련 대외거래분야에서 적극적인 다변화를 시도하고 있는 중진 개도국의 지위를 점한다.

주지하듯 인도네시아는 1997년 아시아 금융위기에 직면하여 실물경제 심각한 타격을 입고 연쇄적으로 정치·사회구조도 회복불능의 지경에까지 이르러, 당시 향후 국가경제회복에 대한 부정적 평가가 점쳐지기도 했지만, 풍부한 부존자원과 노동력이라는 기반 인프라를 바탕으로 2000년 이후 본 궤도 정상진입에 성공하여 현재까지 줄곧 연 5% 이상의 경제성장률을 견인하고 있다. 지표상 2008년 글로벌 금융위기 여파에도 불구하고 6%대 성장률을 기록하였음과 동시에 2010년 실물경제 예상지표에서도 6% 중·후반의 성장이 기대되고 있음은 이를 증한다.

나아가 인도네시아의 FDI는 2008년 이후 현재까지 매년 투자승인 건수만 1,000건을 상회하고 있는 상황인데, 실례로 2010년 3/4분기까지 유입된 외국인 투자자금이 130억 달러를 초과하고 있음은 주목할 만한 사실이다.

인도네시아는 인구 절반인 1억2,000만명이 29세 이하의 청년층으로 구성되어 있음과 동시에, 풍부한 자원과 노동경제력의 비교우위에 기하여 잠재적 성

장가능성이 매우 높은 국가로 평가되고 있는데, 무엇보다도 2억이 넘는 세계 4위의 인구와 그에 뒷받침된 거대한 국내시장의 존재는 당해 평가의 실질적 핵심동인으로 기능하고 있다.

요컨대 인도네시아 경제규모는 2016년 한국, 2024년 일본, 2031년 영국, 2014년에는 독일을 상회할 것으로 예측되고 있음과 동시에, 실질경제성장률이 2011년 이후 6~7%로 가속되어 BRICs에 필적할 것이라는 경제지표가 꾸준히 제시되고 있는 상황이다.

한편 인도네시아 KADIN의 ‘인도네시아 국내 제조센터개발에 관한 로드맵’에 따르면 2015까지 인도네시아 경제성장의 핵심기축은 식품, 섬유, 전기제품 및 부품소재, 수송기기·자동차 등을 들고 있는데, 이들 중 산업구조가 가장 뛰어난 분야로서 통신·정보기기가 우선시 되고 있음 특기할 사항이다. 일례로 이동통신 가입자가 전체 인구대비 62%에 달하고 있음은 당해 특기사항의 실질적 예표로 간주된다.

본 연구에서는 이와 같은 인도네시아의 국가정책적 산업부양의 추이를 주시함에 있어 현재 인도네시아 제1의 산업구조 분야로서 급속한 추진을 전개하고 있는 전자·통신 및 기반인프라 구축에 관한 분야를 전 범위로, 특히 기초적 기반인프라로서 법제적 차원에서의 입법성과를 되짚어 보았다. 곧, 인도네시아는 전자·정보통신에 관한 국가차원에서의 기반인프라 구축이 상대적으로 선진국 대비 열악한 상황에 놓여도 불구하고, AFTA 중 최대의 경제규모를 보유한 주도국의 지위로서 당해 분야에 대한 법·제도적 차원에서의 순기능적 환경개선에 상당한 심혈을 기울이고 있음과 동시에, 이로부터 상당한 소기의 입법성과가 개진되어 있다고 판단되는 바, 당해 특정분야를 예의 주시함에 있어 인도네시아의 현행 전자정보거래에 관한 기축법제로서 그 지위를 담보하고 있는 이른바 LEIT를 중심으로 동 법의 법적 의의 및 특·장점을 살펴보았다.

이로부터 본 연구에서는 인도네시아 LEIT를 비교법적 연구를 통하여 한국의 관련 법제상 문제점 내지 개선점을 도출하고, LEIT 및 한국 전자거래기본법상 입법적 열·우위를 추론하여 그 시사점을 부각함과 동시에, 전자상거래에 관한 법적·상무적 관계개선 및 양자 간 합목적성 도모에 적의 참조할 수 있는 단초를 제공하였다.

이를 위해 취한 비교법적 분석도구는 한국의 전자거래기본법을 포함하여 UNCITRAL의 UECIC, MLEC, 미국의 UETA, UCITA 등이다. 이상의 법규범을 본 연구에서 분석도구로 취한 이유는 주지하듯 개별 법규범이 국제상거래에 있어 선도적 입법례로서 그 위상을 제고하고 있음과 동시에, 각국 관련 입

법 시에 참조할 수 있는 모델법 내지 입법표준으로서 국제적으로 상당한 파급 효과를 개선하였거나 개선하고 있다는 성과에 기인한다. 본 연구의 결과를 요약하면 다음과 같다.

① LEIT는 주요 선진국에 비하여 다소 늦은 2008년에서야 비로소 입법되었음에도 불구하고 그 적용범위는 보다 포괄적이고도 융통성이 있다. ② LEIT의 적용범위와 용어의 정의는 폭넓고 광범위하다. ③ LEIT에 관련 있는 ‘전자적 시스템’(electronic system)에 대한 확장기능성 내지 적용범위 및 포괄대상이 여타 제반 법규범에 비하여 유연하고도 신축적이다. ④ LEIT는 전자정보거래에 관련한 송신 및 수신범위를 통상적으로 네트워크(network) 또는 정보처리시스템(information processing system) 자체 및 상호 간에 국한하지 않고 이를 클러스터(cluster) 및/또는 클러스터 간으로 확장하여 정보통신기술의 발전에 따른 법적 안정성 내지 시의성을 담보하고 있다. ⑤ 법적기능과 확장성을 고려할 때, LEIT상의 용어의 정의에 관한 규정은 폭넓고 상세하다. ⑥ 전자계약에 대한 법적 구속력을 표창하여 자격이 있는 계약당사자의 법적 지위를 담보하고 이에 상당한 법적 구속력의 행사를 보장하고 있다. ⑦ LEIT는 정보기술(information technology), 전자적 시스템의 일반원칙(general principles of electronic system), 전자적 시스템 네트워크(electronic system network), 컴퓨터(computer), 접속코드(access code) 및 전자계약(electronic contract) 등을 구체적이고 포괄적으로 정의하고 있다. ⑧ LEIT는 전자거래의 적용범위를 ‘민사적 및 상사적 활동’에까지 그 지평을 확대하고 있음과 동시에, 전자거래와 전자상거래를 명확히 구분하여 그 적용대상을 포괄하고 있다.

한편 LEIT는 한국의 전자상거래법에 비할 경우 다음과 같은 법적 문제점이 내재되어 있다고 판단된다. 이를 열거하면 다음과 같다. ① 전자계약의 조건 등에 관한 법적 효력 및 계약성립의 요건으로서 청약과 승낙의 구속력에 관한 특별한 규칙이 없다. ② LEIT를 보충할 수 있는 전자서명 및 전자인증 등에 관한 별도의 법률이 존재하지 않고 있다. ③ 정의규정이 매우 포괄적임과 동시에 그 적용상의 폭과 범위가 매우 넓다. ④ LEIT에 있는 개인정보보안, 지적재산권 및 도메인 등에 관한 유관조항이 별도의 법률체계를 구성하고 있지 못한 까닭에, LEIT의 적용상 상당한 혼선이 예상된다.

키워드: LEIT, MLEC, UECIC, UETA, UCITA, FAEC