The Information Society Law in Japan

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Abstract

About 50 years have passed since information society was born. Meanwhile were born many laws which related to information, information devices and information communications. Among the laws, some laws were newly established and others were revised. Today we live most of our life in the information society. Then those laws should be systematized as "An Information Society Law."

The Information Society Formation Law is the backbone of the information society law in Japan. The Law will form an advanced information and communications network society. It provides that the formation of an advanced information and telecommunications network society shall be done for the purpose of achieving a society where every citizen has an opportunity to easily and independently use the Internet and other advanced information and telecommunications networks and where they can fully and creatively use their abilities through such opportunities thereby reaping the extensive benefits of information and telecommunications technologies.

The information society law could be "an information law for the 21st century." The law regulates the infrastructure of information society which is composed of "information," "information devices," and "information networks." The Information Society Law can be systematized by the following 12 Laws: Information Society Formation Law; e-Government and e-Local Governments Law; Information Communications Law; Online Administrative Procedures Law; E-Documents Law; Information Circulation Law;Information Property Law; Electronic Contracts Law; Information Freedom Law; Personal Information Protection Law; Information Protection Preservation Law; Internet Young User Protection Law; Information Criminal Law.

1 Introduction

About 50 years have passed since the information society was born in Japan. At the first term, the society was called a computerized society, or a computer society. It was called an information-oriented society, or an information society and an advanced information society. People might read a cultural fragrance in information rather than in computers as machinery. With telecommunication devices of networks, the information society was changed into an advanced information society and an advanced information network society. Today we live our lives in ubiquitous society, or smart ubiquitous society. Anyone who has an information terminal, can access the Internet at any time and anywhere.

Since 1990s, a new computing concept has been spread in all over the country and the Internet has been popularized in the people. Information accidents have rapidly increased

in number on the information superhighway since then.

In Japan in 2000-01, the information and communications technology revolution has generated particularly strong interest. Clearly positioning IT as an important strategic issue, the Japanese government is undertaking various programs to ensure its advance. Japanese society as a whole has strong expectations that IT, as the basis of development in the new century, will spur reform of the nation's economic framework and bring greater efficiency to industry and allow for diversification of people's lifestyles and enhance the convenience of their daily activities.

In cooperation with the IT revolution, information society laws were established: unauthorized computer access act (1999); information society formation act (2000); combined communications and broadcasting act (2001); revised communications business act (2001); electronic signatures and certification business act (2000); electronic consumer contracts act (2001); revised criminal act(2001).

Fortunately we Japanese could have the Basic Act on the Formation of an Advanced Information and Communications Network Society in 2000. In this Act, advanced information and communications network society means a society in which creative and vigorous development can be achieved in all fields by obtaining, sharing or transmitting globally a wide variety of information or knowledge in a free and safe manner via the Internet and other advanced information and telecommunications network. The Basic Act provides for basic principles and a basic policy on the development of strategies with respect to the formation of the society, and determines the responsibilities of the Government and local public entities, and provides for the development of a Priority Policy Program on the formation.

This Basic Act shall describe a grand design of information society, and the other information society laws shall contribute a secure running of the society from every respect. In a word, the information society law shall prevent information accidents, and protect the rights and profits of peoples' of the 21st century.

2 The Information Society of Japan

The information society of Japan can be divided into five terms. The first formation term(1965-1984) is chronologically composed of a computer society, a main computer society, a code number society, a card society and a databank society. The second growing term (1985-1990) is chronologically composed of a new media society, a network society, a multi-media society, an IC-card society, and a personal computer society. The third progressing term (1991-2002) is chronologically composed of the Internet society, an IPv.4 society, a grid computing society, e-Japan society and a handy phone society. The fourth developing term (2003-2007) is also chronologically of a P2P society, a cyberspace society, a wireless society, a Web2.0 society and u-Japan society. The fifth matured term (2008-2010) is chronologically composed of a ubiquitous society, an IPv.6 society, a twitter society, a virtualization society, and a cloud computing society.

Each term and sub societies are characterized by the information technologies of the ages. Politics and political economy could select the technologies. But all the information technologies have continued to be used until today as having been changed in the shape. No technologies have been dead.

Information society is a multi-faced society. The information society has many sub societies, from a computer society, a card society, a databank society, a personal computer

society, a cyberspace society to a ubiquitous society, an IPv.6 society, and a cloud computing society. People can move, live, play and work in the sub societies.

Present society is also a multi-faced society. There are many societies in the present society, too. An agricultural society, an industrial society, a fishing society, an automobile society, a convenience stores society and an information society. Information society is only one of sub societies in the present society. Most people think that the present society is wholly an information society, because computers and networks are used in all the sub societies. While people are making cars, they work in the industrial society. While people play and work with computers and networks, they live in the information society. People won't be able to call information society a society where there are neither computers nor networks. People can move various societies according to their roles.

3 Information Society and Law

3.1 Technology and Law

Information society a technological society which is an infrastructure of computer, communication, software and networking technologies. Generally speaking, an information technology should make more seven times rapid than a legislation technology. Because ICT has an electronic rapid and law has a paper rapid. Laws would walk after technologies. It is always law's fate to be left behind by technologies. It is particularly serious for laws not to control a security standard of using technologies.

3.2 Technology, Security and Law

In many cases a law has anything to do with a technology, the law would provide the security standard of technologies. At the same time, the law also would provide the structure standard of technologies. In most technologies, a security standard would be reflected in the security standard.

3.3 Absolute Security and Relative Security

In using a technology, when there should not happened an accident even if anyone at anytime and anywhere, it may be said that the technology has the absolute security. The technology is perfect from a viewpoint of security. But such a technology cannot be imagined. Technologies would have some defect from a standpoint of the users. Users are using technologies considering the defects lest they should come across accidents. They might be in accidents if they use wrongly the technologies. But, there should not occur any accidents by the ordinary using. This is relative security. So, laws would require technologies of the relative security.

4 Information Technology and Information Accidents

4.1 Information Technology and the Defects

All the technologies that we would use today have a kind of defects. But the technical experts willingly would never accept the words. I don't believe in the existence of a perfect technology with no defects. The technological progress means the efforts to reduce the effects as far as possible.

Computer, information, communications, and networking technologies, these technologies are being utilized in most wide-ranging. Even if these ICT's are utilized in

laboratories, they would not cause problems. However, various problems have realized, as soon as those technologies appeared in our society. The defects of information technologies have seized the users with its fangs. The end-users have little knowledge of ICT. And they have no idea of ICT defects.

4.2 Defective Technologies and Information Accidents

There can be found defects even in computer systems and networks. Those defects might be so-called security holes, which can be called the vulnerability and the weak points. Depending upon the defects, not only do the users receive damage, but also there is a possibility of causing damage to the other users. These are the information accidents.

4.3 Information Accidents

Acceptable Use Policy existed in the Internet before. Then the use was limited to research and educational purposes. In a word, business was not able to be performed in the Internet. At that time there were few information accidents. In 1990's, the Internet was opened to business purposes and the user's limitation was removed in fact. The policy was abolished. Then the situation changed suddenly. The information accidents increased rapidly. It is because the user who doesn't know the Internet technology has participated in the Internet all at once.

The information accident is the incident on the Web, where the Internet users' rights and profits are violated. The information accidents occurs on the information superhighway same as the traffic accident does on the highway. The information accidents are collisions. Most of the information accidents are in collision with the principles of the constitution and the important principles of the social life.

a. Collision with freedom of expression
b. Collision with free speech
c. Collision with right of privacy
d. Collision with copyright law
e. Collision with right to data protection
f. Collision with contract law
g. Collision with criminal law
h. Collision with unauthorized computer access law
i. Collision with minor protection law
j. Collision with information security
k. Collision with business ethics
l. Collision with network etiquette
m. Collision with computer systems

5 Information Society Law

5.1 The Meaning of Information Society Law

The place where people use computers and networks is in the information society. People live their information lives in the society. In the present age, an information society is also a part of the modern society, as well as an industrial society, an agricultural society, a fishing society, and a convenience stores society. And people often should move to these societies through their long lives. Even in an information society, people move to the

Internet society at some time, a blog and twitter society, a cloud society at another time. They should return to their home in the information society if the work or the recreation ending.

There are, in fact, formed an internet society, a cyberspace and a cloud society in computers, blade servers. The apparatus are installed in information society. The societies are so-called logical world which are virtualized in the server computers. The internet business is regulated by Telecommunications Business Law, which also controls a normal telephone business. Because the Internet uses a part of a telephone circuit. In that sense, the Internet is only a way of telecommunications between the Internet users. The contents in the Internet are regulated by Copyright Act. An unauthorized computer access is prohibited by Act on the Prohibit on an Unauthorized Computer Access. These acts have already been in force in the information society.

Today we may see various names of the legal system which relates to the Internet, networks, and computer systems. For example, “Multimedia Law,” “Information Law,” “The Internet Law,” “Cyber Law,” “Cyberspace Law,” “Information Security Law,” or “Cloud Law,” “Cloud Computing Law.” But all these laws regulate and control the information life. Therefore, all the laws could be introduced into the system of information society law.

5.2 The Characteristics of the Information Society Law

5.2.1 Reflection of Computer System in Social System

The concept of computer system is composed from three main ideas: downsizing; open system; distributed processing; networking; end-user computing.

The downsizing in social systems reflects in a small government which reduces administrative cost by shaving many auxiliary organizations and refraining from the employment of the government employee. The distributed processing and end-user computing will try to change centralized politics to decentralization of power. Then local governments will have an authority of self-determination excluding military and international affairs. The open system and networking will contribute the standardization of local areas by exchanging information through networks.

5.2.2 Information Technology Controlled with the Information Technology

The infrastructures of information society are “information,” “information processing devices,” and “information circulation routes.” Software and contents technologies will relate to the information. Computer and machine technologies will relates to the devices. Networking and internet technologies will relate to the routes.

The information society law should introduce the information technologies in order to raise the effectiveness of the law itself. This introduction might be permitted only to the information society law. This means that information technologies should control themselves in the law. It is really the fusion of technology and law.

5.2.3 The Fusion of Technology and Law

The Electronic Signatures and Certification Business Act has introduced encryption technologies. The purpose of this Act is to provide the presumption of authentic establishment of electromagnetic records by electronic signatures. In the Act, any electromagnetic record that is made in order to express information shall be presumed to

be established authentically if the electronic signature is performed by the principal with respect to information recorded in such electromagnetic record. The authenticity and electronic signature of the electromagnetic record can be verified by the public key criptosystem.

In the Act Concerning Environment for Children to Safely Use the Internet, information providers shall be obliged to provide filtering technologies. This Act focuses on measures to protect minors from harmful information and explicitly provides for the direction of future efforts with respect to a vision of the environment for Internet utilization.

5.3 The System of Information Society Law

The system of information society law should be the driving force to build and develop the information society of the 21st century. In 2001, we, Japanese could have Basic Law on the Formation of an Advanced Information and Telecommunications Network Society. In the legal system, the other information laws will be arranged under this Basic Law.

5.3.1 Information Society formation Law

The purpose of this law is to provide for basic principles and a basic policy on the development of strategies with respect to the formation of an advanced information telecommunications network society, to determine the responsibilities of the Government of Japan and local public entities, to establish the Strategic Headquarters for the Promotion of an Advanced Information and Telecommunications Network Society and to provide for the development of a Priority Policy Program on the formation of an advanced information and telecommunications network society in consideration of the urgent need to appropriately keep pace with the rapid and drastic changes on a global scale in the socio-economic structures arising from the use of information and telecommunications technologies, to swiftly and throughly introduce the measures for the formation of an advanced information and telecommunication network society.

*Basic Act on the Formation of an Advanced Information and Telecommunications Network Society
*Basic Act on Intellectual Property
*Act on the Promotion of Information Processing
*Basic Act on the Protection of Consumers

5.3.2 e-Government and e-Local Governments Law

This Law shall decide on the e-Government and e-Local Government that stipulates concrete efforts by the governments relating to the building of e-government. On the basis of this program, the governments are tackling business reform to improve the convenience of the public and services and respond to the spread of IT. The purposes of the e-governments are to put almost all the procedures relating to application, notification handled by administrative organizations of the state online, and to make efforts in a strategic and cross-sectional manner toward the simplification, greater efficiency, and rationalization of administrative operation through the optimization of business and systems, the government conducted a systematic rearrangement of the business and systems of the government as a whole.

With regard to performing administrative procedures online, the Act Concerning the Use of Information and Telecommunications Technology on Administrative Procedures came

into force in 2003, and the development of systems including a government public key infrastructure (GPKI) and a general-purpose reception system was completed by the end of fiscal 2003. The development of an environment for performing administrative functions online is basically complete including the Basic Resident Registers Network System becoming fully operational in 2003 and the start of a public personal certification system that operates online, as well as electronic payment services for payment of taxes and various administrative fees in 2004.

The Local Government Wide Area Network(LGWAN), which is an administration-dedicated network connecting local governments, was connected with the intranets of prefectures and ordinance-designated cities and with e-Government Kasumigaseki WAN Network. The Basic Resident Register Network System went into full-scale operation. The Basic Resident Register IC card as serving as a public identification certificate is playing an important role as the basis of e-government and e-local government as well as the system.

In addition, during 2003, all local overnments bodies began participating in the Local Government Wide Area Netwrk (LGWAN). Using this environment, the online filing of most applications and notifications handed by central government agencies became possible by the end of fiscal 2003.

5.3.3 Online Administrative Procedures Law

This law has made possible sending by e-mail, for applications, submissions, and notifications where administrative organizations are the main entity or addressee.

With regard to acceptance of online administrative procedures all administrative procedures including applications and notifications by individuals and companies will be made accessible around the clock from home and office computers via the Internet. In the area of legal systems, the three acts for providing online administrative procedures, namely, the Act Concerning the Use of Information and Telecommunications Technology on administrative Procedures, the Act Concerning Preparation of Related Acts for Enforcing Online Administrative Procedures Act, and the Act Concerning Digital Signature Certification of Local Public Entity (Public Individual Cerfication Act) for further comuterizing the central and local governments passed the Diet in 2002.

Furthermore, in order to enable application, report and other procedures to local governments available on the Internet, Government developed a certification infrastructure for organizations that was compatible with the Government Public Key Infrastructure (GPKI).

An electronic certificate from the Public Certification Service for Individuals (JPKI) service is valid for five years. It is issued by being sotored in a smart card such as the Basic resident Register card after strict personal identification process.

5.3.4 E-Document Law

Of finance and tax related documents and ledgers required by law to be stored by private businesses, for those for which electronic storage is not approved, this law shall enable electronic storage of these documents and ledgers while ensuring credibility and visibility according to the contents and nature of the documents and ledgers based on the advance of information technologies. And this law shall approve the electronic storage of ledgers input on the computer without printing on paper.

*Electronic Ledger Act
*Act on Use of Information Communication Technology in the Storage of Writing by Private Businesses

5.3.5 Information Circulation Law

This is a law which relates to the circulation of information in the information society. The law regulates a type (telecommunications or broadcast) of circulation , a way of circulation, a circulation technology, circulation apparatus.

The term “convergence of telecommunications and broadcasting” refers to a variety of phenomena accompanying digitization and broadband. These phenomena include progress in the online distribution of image and sound contents, sharing of terminals, and networkss, and cross entry between telecommunications and broadcasting. In the future, it is expected that the convergence will accelerate, and will new entry and the development of new competition are expected to make this convergence a new, leading industey which will contibute to economic growth.

Digital technology has seen siginificant progress, and the communication capabilities of networks have drastically risen through the use of broadband; the communications are now available both to telecommunication service and to broadcasting service.

In 2002, the Law Concerning Broadcast on Telecommunications Service was enacted, setting legal stipulations for broadcasting using telecommunications services.

In 2009, comprehensive proposals were made concerning the establishment of the new act on convergence, the review of regulations related to telecommunications, the deregulation of broadcasting, and other topics, which targeted the year 2011 when the world's most advanced infrastructure of telecommunications and broadcasting will be completed,toward achieving the goal of becoming a “broadband, mobile, and television superpower” in which Japan can exercise its strength.

5.3.6 Information Property Law

The purpose of this law is to promote measures for the creation, protection and exploitation of information property in a focused and systematic manner by stipulating the basic principles on the creation, protection and exploitation of information property and the basic matters to achieve the principle, clarifying the responsibilities of national government, local governments universities and business operators, providing stipulations on the development of a strategic program on the creation, protection and exploitation of information property.

*Intellectual Property Act
*Copyright Act
*Act on the Creation, Protection and Exploitation of Information Contents

5.3.7 Electronic Contracts Law

In the efforts to remove impediments to the IT revolution, the Japanese government has revised components or the regulatory system to allow private-sector transactions to take place via e-mail as well as by the traditional exchange of paper documents.

The Electronic Signature and Authentication, which came into force in 2001, was enacted to give legal status to electronic signatures as a means of verifying that the other party in an e-commerce transaction is really who he or she says he is and to create a national

approval system for electric certification operation.

5.3.8 Information Freedom Law

The purpose of this law is to endeavor towards greater disclosure of information held by administrative organs thereby ensuring to achieve accountability of the Government to the citizens for its various activities, and to contribute to the promotion of a fair and democratic administration that is subject to the citizens' appropriate understanding and criticism.

*Act on Access to Information Held by Administrative Organs
*Act on Access to Information Held by Incorporated Administrative Agencies
*Act Concerning the Promotion of Business Activities with Environmental Consideration by Specified Corporations etc., by Facilitating Access to Environmental Information, and Other Measures
*Pollutant Release and Transfer Register Act

5.3.9 Personal Information Protection Law

The purpose of this law is to stipulate the basic concepts and the basic policies of the Government regarding the proper handling of personal information and other basic matters in connection with the protection of personal information, to clarify the duties of the State and the local governments in relation therewith, and to protect the rights and interests of individuals by stipulating the obligations to be complied with by the businesses handling personal information while taking the usefulness of personal information into consideration.

*Personal Information Protection Basic Act
*Act on the Protection of Personal Information Held by Administrative Organs
*Act on the Protection of Personal Information Held by Independent Administrative Agencies

5.3.10 Information Protection and Preservation Law

The purpose of this law is to secure the key concepts of information security. Confidentiality of information ensures that only those with sufficient privileges and a demonstrated need may access certain information. Integrity is the quality or state of being whole, complete, and uncorrupted. The integrity of information is threatened when it is exposed to corruption, damage, destruction, or their disruption of its authentic state. Availability is the characteristic of information that enables user access to information without interference or obstruction and in a useable format.

The Provider Liability Limitation Act was enforced in 2002 as a measure against increasing cases of information violation of the rights of others on a website or BBS. This Act provides limitation and clarification of damage liability of providers in cases where the rights of others are violated and the rights of a person whose rights have been violated to demand the provider to disclose the information source.

The Law on Identification of Cellular Phone Users by Mobile Operators and Prevention of Abusive Use of Cellular Phones obliges mobile phone operators to conduct identity verification when concluding contracts or transfer to prevent the abuse of mobile phones.

Since the Act on Regulation of Transmission of Specified Electronic Mail includes a provision whereby telecommunication operators can refuse the false e-mail address, it can

also be effective as a countermeasure against phising.

5.3.11 Internet Young User Protection Act

The formal name of the Act is " Act on Development of an Environment that Provides Safe and Secure Internet Use for Young People." The purpose of this Act, in light of the situation where content harmful to young people is distributed extensively on the Internet, is to contribute to the protection of the rights of young people by providing them with safe and secure Internet use through taking measures necessary for young people to acquire skills for the appropriate utilization of the Internet as well as improving the performance and disseminating the use of software for filtering content harmful to young people and any other measures, etc. for reducing the chance of young people viewing content harmful to young via the Internet as much as possible.

5.3.12 Information Criminal Law

The law prohibits information crimes, that is, cybercrime, computer crime, network crime and card crime. Cybercrime is offenses against the confidentiality, integrity and availability of computer systems networks and computer data as well as the misuse of such systems, networks and data according to Convention on Cybercrime (Council of Europe). The types of the crime are illegal access, illegal interception, data interference, system interference, misuse of devices, computer-related forgery, computer-related fraud, content-related offenses, and offenses related to infringements of copyright.

The types of computer and network crimes are unauthorized creation and use of electromagnetic records, computer fraud, damaging of documents for government use. The types of cards crimes are unauthorized creation of electromagnetic records of payment cards, possession of payment cards with unauthorized electromagnetic records, and preparation for unauthorized creation of electromagnetic records of payment cards.

6. Conclusion

I would not intend to rearrange information laws with the title "the information society law," unless we, Japanese, had the information society formation basic act. In the system of information society law, the basic act occupies a central position. Because the act describes a grand design of an advanced information and communications society, a ubiquitous network society of the 21st century.

So far, laws would chase after technologies. Some time lag always would exist between law and technology. But there may be a possibility to recover the time lag in the information society law. The law can have a technology control the technology itself. This is just a fusion of law and technology. The very fusion would appear in the information society law of the 21st century.

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