

Research on Relevant Legal Problems of Electronic Evidence

Xue-Guang WANG

Criminal School, East China University of Political Science and Law, shanghai, 201620, China
wangxueguang@ecupl.edu.cn

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Abstract. Through overview of the law situation about electronic evidence in China and other countries, this paper points out the relevant legal issues in the development process of the electronic evidence. Combined with the current situation on this basis, it generalizes the current main problems existed in the development of electronic evidence in China and the suggestions to solve the problem.

Introduction

The development of computer and the Internet brought unprecedented convenient to human beings, but also bred new illegal and criminal activities related to the computer and the Internet, and increasingly became a global problem at the same time. According to statistics, on a global scale, the economic loss due to computer and network crime has reached up to billions of dollars every year, and the statistics showed a trend of rising year by year. In order to deal with illegal and criminal activities, countries around the world has been started to explore and research the legislation of the related criminal activity from 80s and 90s of the last century. After 30 years of legislative attempt and practical application, various countries in the world preliminary experienced the process, which is the relevant legislation of electronic evidence (also known as electronic data evidence) started from scratch and gradually modified and perfect.

Situation at Home and Abroad

Internationally, the law has given the status to evidence of electronic data, and tried to perfect the legislative structure of electronic evidence. For example, in the early days, due to its provisions, which is the facts can prove real situation in the case can be adopted by the court in the continental law system countries but fewer restrictions on the evidence types, led to although electronic evidence is lack of a clear legislative provisions, but still can be used. However for the Anglo-American law systems, due to its adherence to the "best evidence regulation", the original copy is considered as the most authentic, the most reliable forms of evidence. In fact, electronic evidence does not have the "original copy" in the traditional sense, the original copy is just a bunch of electrical, magnetic, optical signals which people can't identify with eyes, because what people see is the external manifestation of electronic evidence, which makes the application of electronic evidence in litigation or arbitration is limited.

Compared with Information technology developed countries, it's a litter later to entry into the era of network, but since entering the 21st century, China has constantly strengthened the relevant legislation and regulations of electronic evidence. China's three major procedural law have established electronic data to be the legal evidence types in succession since 2013, the Supreme People's Court and the Supreme People's Procuratorate also have introduced how to use and affirm the judicial interpretation of electronic evidence during this period, at the same time, the State Council and subordinate unit also issued on the relevant administrative regulations on electronic evidence. At present China basically have formed the system of electronic evidence on the basis of the three major procedural laws and supplement by the other evidence regulations.

Legal Problems Related to Electronic Evidence

With the application and development of the electronic data, there are some corresponding problems in the field that how to use the electronic data, from the legislation on electronic evidence and research situation at home and abroad.

The Legal Appellations of Electronic Evidence

Electronic evidence has experienced a development process from never be adopted, to gradually be recognized, from written electronic to the evolution of the electronic evidence [1]. Whether in China or abroad, legal appellations of electronic evidence didn't happen overnight, it probably went through electronic records, data message and computer evidence (network evidence), etc.

Although today's electronic data has been accepted by the domestic and foreign legal, but due to the electronic data is the fusion creation of technical and law, there are still some disputes on the connotative understanding for some scholars. But we can find that various countries have basically agreed with the appellation of electronic evidence from the current general research results and related legislation of electronic evidence. Namely, the electronic data can refer to all relevant data, information, but the electronic evidence is the related legal title of electronic data in the litigation activities [2].

The Verification of Electronic Evidence

The verification of the electronic evidence is the admissibility problems of electronic data, from the perspective of evidence, admissibility of evidence can be called evidence ability (appellation of civil law system). Evidence ability refers some physical objects in law can be used as evidence of the qualification. Only after physical objects have the evidence ability can be used as a method of evidence in the lawsuit, such as the witness must have ability to witness, it also known as the qualification evidence [3]. Any evidence, if it want to possess evidence qualification and be adopted, namely has the admissibility, it must accord with the requirement of "three kind of evidence", namely the objectivity of evidence (or reality), relevance and legitimacy.

The Collection of Electronic Evidence

Electronic evidence collection has to follow the principle of legal, voluntary and true, the parties are not allowed to illegally invade others' computer information system to get evidence. If the evidence is provided by the third party, the third party shall issue initial state evidence and guarantee that it have not be changed since it generated or received, and the person should voluntarily provide basis to provide the file of the evidence or digital signatures. In view of the fact it is difficult to get the other's evidence for the party in dispute, it's the tort-feasor's responsibility to put to the proof in the disputes caused by infringement. The way of evidence collection can be various, but it must comfort to the requirements in the form of law, especially ask the ISP or professional network company or data company for some evidence, we will strictly abide by the confidentiality agreement and the terms of service signed with the customer. And it is not be permitted to arbitrarily reveal users' personal information, it more can't steal other people's privacy and confidential information in the name of lawsuit needs [4]. Collection, use and judgment of electronic evidence is a gradually improving and standardizing process, to a large extent it depends on the development of technology and the promotion. So the legislation should both has advancement and flexibility, it not suitable to enact too quantitative terms.

The Preservation of Electronic Evidence

The 81th regulation of "Civil Procedure Law" in China rules: "participant of litigation can apply for saving evidence to the People's Court for preservation of evidence, the People's Court can also take the initiative measures to protect evidence, in some case that evidence may be lost or it is difficult to obtain."

Today with rapid development of computer crime, for the parties, the preservation of electronic evidence is likely to be the most important way and the most effective means to obtain evidence for

the party. But We must hold very prudent attitude on electronic evidence's preservation. So there will be many problems to study on the specific operation. Because the applicant is usually required for assuring the safe of the other's evidence, and the location of the evidence is very complex, they could be kept within respondent's machines or peripheral storage devices, and also be in one or several servers on the network, that may involve some problem, such as invasion of privacy (including the third party) and customer privacy issues. In addition, electronic evidence's preservation put forward high technical requirements, it is not only simple copy and export of electronic data ,but also need to remove the whole memory from the machine and hire specialized personnel to deal with the data , such as identification and revivification etc. Once the hardware is damaged or wrong operation, which may result that data cannot be read or destroyed, the losses will be immeasurable. So we must pay high attention to these aspects [5].

The Presentation of Electronic Evidence

This is an era of visual media, information can spread and display through a variety of channels, such as text, voice, image and video, and the studies show that people the change of visual is more conducive to improve the understanding of information and the effect of learning and memory. Presentation of evidence is a process that the parties show the involved evidence, which are checked and analyzed by the judiciary, appraisers, litigant and other related personnel inspection and is used to prove the facts of case, to the judge and the parties according to law in the trial. Whether prosecutors or litigation if they can effectively display evidence in the lawsuit trial, it must be useful to the probative force of evidence, the efficiency of lawsuit and the whole procedure of lawsuit. So presentation of electronic evidence is also an important part of the court trial in the judicial practice.

The Problems and Suggestions of Electronic Evidence in China

The Hierarchy in Legislation of Electronic Evidence

The legal system on electronic evidence in China is relatively scattered and confused, includes both the basic laws of high force, such as "Law of Electronic Signature", "Contract Law", "Law of Criminal Procedural", "The Law of Civil Procedure " and "The Law of Administrative Procedural", and also the lower local norms. Both include the law reflecting the will of the state, but also regulations reflecting the local lawmakers' opinion. Specifically, our legislation system of electronic evidence bases on the three main procedural law, "Contract Law", "Law of Electronic Signature" and "Law of Traffic Safety" and so on as the foundation of qualitative, so that determine the status of electronic data's evidence. Secondly, in view of all aspects of national basic involving society and people's livelihood, infrastructure and so on, the administrative rules can regulate related regulations, such as "The Telecommunications Ordinance". And administrative rules and local laws and regulations will rule and compile in detail according to the basic law of qualitative theory of the relating electronic evidence and all aspects of the involved administrative regulations, such as "The Program Rules of The Criminal Cases Handled By The Public Security Organ". Moreover, in judicial practice related to electronic evidence, China will supplement the corresponding judicial interpretation aim to some new or puzzling question , such as "some issues of applicable law in civil disputes heard by the supreme people's court about infringement personal rights and interests by information network" etc.

Overall, the skeleton of electronic evidence's legislation is similar to the other specialized legislation system, but after deep analysis, we can find that high force basic law and administrative rules and regulations is relatively lack of the criteria of judicial judgment and enforce foundation in specific judicial practice; The low order regulation confined in a specific department, local laws and regulations is limited to the scope of an area, they have so heavy local color that it's more difficult to put in force in the country. So the judicial organ and the inspection organ need to continuously grope the way of solution in the judicial practical. The usual treatment is to norm the specific issues in the form of judicial interpretation, which seems to have formed a "circle" of "take stopgap measures".

Overall, we have not formed the basic ideas and legal culture to resolve the legal problem on electronic evidence. Therefore, to change the situation fundamentally, we must do something in the aspect of legislation. Systematic legislation of electronic evidence is becoming the research direction of many scholars.

The Responsibility Determination of the Electronic Evidence and The Subject Associated with Electronic Evidence Is Not Ambiguity

By the first half of 2015, the number of Chinese Internet users has reached 668 million, one of which, the number of web users by mobile phones for shopping and payment is 546 million [6]. It is estimated that the number of Internet users in all the world is up to 3.2 billion until the end of this year. For many Internet users, most of them make trades by the network. So there are a large number of network security problem. According to statistics, 46.3% of general Internet users met online disputes and network security incidents in 2014, such as leakage of personal information, the fraud of network consumer, the infringement of network copyright and the stolen bank account, etc. [7]. In the face of the situation, it is in urgent for lawmakers to develop effective rules to solve the problem of disputes, in order to identify the responsibility of the related subjects in the network service. Although both at home and abroad, the countries have made a series of rules and mechanism to solve the problem according to the development of the Internet. However, these countries are lack of the associated responsibility system of unified electronic evidence. The main common problems are that: 1. The main body of responsibility is only limited to the Internet service's providers, but there are no connected and relational differences and determination according to the main features of the subject related; 2. The present law usually separates the relations between rights and obligations, but is lack of the responsibility determination from the obligation to responsibility.

From the relevant situation at home and abroad, the responsibility determination system of the subject associated with electronic evidence in various countries (hereinafter referred to as the responsibility system) should include three aspects: the classification of the general and specific subject; The climax from the rights and obligations to the responsibility; The unity of the principles and rules on responsibility determination. One of that, the classification of subject is the basis of the responsibility system, the duties and responsibilities is the main object of responsibility system, principles and rules is the gist of responsibility determination in the responsibility system, the three aspects is an organic unified and complement each other.

The Norm of the Forensics and Authentication about Electronic Evidence Remains to Be Enhanced

In law, the requirements of evidence forensics for electronic data are scientific, real and effective, objective, and very normative. The electronic evidence obtained by this way possesses a powerful force of law. But we have not fully met these requirements for the electronic evidence forensics, as the reason the electronic evidence forensics is influenced by various factors, there are still some problems. With the popularity of computer, more and more criminal cases and lawsuits involves the electronic evidence forensics. To research and develop special law of electronic evidence forensics, and realize the standardization of the electronic evidence forensics has become an urgent need of the judicial activities urgent needs of the judicial activities to strike computer crime and solve the dispute of "electronic".

Electronic data's judicial authentication mainly involves two aspects: legal regulation and technical implementation. Because it is both a kind of forensic science authentication, and need with the aid of the knowledge in information science, at the same time it is an important means of judicial litigation proof. Therefore, the problems existing in the judicial authentication of electronic data don't only involve its institutional problems of judicial authentication, but also technical problems caused the nature of the electronic data. So, to study and formulate special legislation about the judicial authentication of electronic data, which concludes the certification standards of appraisers qualification of electronic evidence, the norm of electronic evidence authentication, the standard of electronic evidence authentication and so on, is desperately needed.

The Flaws of Legislation on Electronic Evidence

At present, the legislation on electronic evidence in China mainly focuses on the investigation procedure and certification rules of the electronic evidence. But as a highly technical thing, the electronic evidence is still lack of basic research on the legislation, and some rules is too rough to resolve the problems in judicial practice.

The Validity of Legislation Is Low, the Lack of Independent Basic Laws and Regulations

At present China has not set separate legislation on electronic evidence in each department. These only involved the electronic evidence, such as "The Contract Law", "The Electronic commerce Law", "The Civil Procedure Law", "The Criminal Procedure Law", "The Administrative Procedure Law". The rules of "The Contract law" and "the electronic commerce law" on electronic evidence is only illustrative rules, without further explanation. The three major laws of legal procedure on electronic evidence just brought it as the legal evidence type into the "evidence" chapter, and no more detailed rules. Second, certification rules on electronic evidence is more projects (the supreme people's court and the supreme people's procuratorate) in judicial explanation or jointly with other departments of administrative rules, for example, "the supreme people's court provisions about civil action evidence", "the explanation of the supreme people's court on implementing some issues of the criminal procedure law of the People's Republic of China", "the explanation of the supreme people's court about the applicable law of the People's Republic of China in civil procedure law", "the supreme people's court on hearing civil cases of dispute over the use of information network infringement personal rights provisions on some issues of applicable law" and so on. The ministry of public security gives the administrative rules, for example, "procedures for the criminal cases handled by the public security organ". The other is administrative rules issued by the State Council or subordinate departments, for example, "the measures for the administration of Internet information services", "the protection regulations on the user's personal information of the telecommunications and the Internet", etc. Therefore, the specific legislation on electronic evidence in China is just called a kind of judicial explanation or administrative rules or regulations, the judicial interpretation and administrative rules and regulations can be quoted by the court judge, but the specific application of department regulations are less reflect the referee in law. Overall, the effectiveness on the legislation of electronic evidence in China is low, we are lack of a higher level of basic laws and regulations, it results the judgement involving electronic evidence from various areas' courts sometimes are not unified across the country.

In addition, with the development of informatization, the problem of network or technical illegal crime must not be simply blamed in civil law and criminal law. When the information illegal crime become the norm, it must need to build a new network crime punishment responsibility system, which requires to clear network illegal and criminal behavior of electronic evidence legislation reconstruction, formed a complete legal framework to solve the network crime problem. Therefore, the legislation of the electronic evidence has become extremely urgent.

The Provision Is Too Rough to Realize Judicial Practice

From the point of the current state of legislation of electronic evidence, some legal explanation and illustration of the electronic evidence is too rough to realize judicial practice. Article 11 of "the contract law of the People's Republic of China" points out the "written form" refers to the form contained in contents that the contract, letters and data message (including telegram, telex, fax, electronic data's exchange and E-mail) and so on, can tangibly express. But a description of the data message is only an expression approach of electronic contract, the specific procedures and conditions on establishment of electronic contract in practice are both likely different with the contract with paper, "the Contract Law" does not specifically illustrate how to review the specification. Such as, the Article 116 of "the interpretation of the supreme people's court about the applicable law of the People's Republic of China civil procedure law" gives the explanation of the electronic data, which refers to by email, electronic data interchange, online chat, blog, microblog, text messaging on

mobile phones, electronic signature, domain name and other information in the form or stored in the electronic media. The enumerated type definition makes recording data and image data stored in the electronic media, etc., applicable to the provisions of the electronic data. But with the continuous development of existing technology, some data in the form of electromagnetic waves or light transmission and exist, it does not cover, there are still not comprehensive.

In addition, some rules are just to illustrate, but no the corresponding interpretation for the specific operating requirements, this may damage or affect the integrity of electronic evidence and legitimacy in the actual technical operation. For example, the Article 22 of “the certain provisions of the supreme people's court about civil action evidence” rules : "when the investigators are collecting computer data or audio-visual materials such as audio, video, etc, they should require the respondent to provide the original carriers of the relevant information. If it is surely difficult for the respondent to offer the original carrier, they can provide a copy. After that, the investigators should explain its origin and making process in the investigative records." It made requests for copies of computer data in the Article 22, which says the investigators should ensure its legitimacy and integrity. But there are no specific specifications about what kind of standard the specific operation requirements of the "copy" need to reach in the regulations. Therefore, for the people, of which professional ability is different, in the implementation of the operation, because of the differences in their operation technical, which probably lead the primitiveness of electronic evidence to be damaged or affected, so that the electronic evidence will lose the legally binding.

Summary

This paper points out several aspects of the problem in the development process of the electronic evidence, which includes the appellation of the electronic evidence, the determination of electronic evidence, the collection of electronic evidence, the preservation of electronic evidence as well as the presentation of electronic evidence etc, through overview of the law situation about electronic evidence in China and other countries. Combined with the current Chinese situation on this basis, the paper generalizes the current main problems existed in the development of electronic evidence in China and the suggestions to solve the problem.

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