Brief Analysis of perfecting the law of maintaining computer network security

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Abstract: Since the 21st century, computer network technology has developed rapidly, and now all industries are inseparable from the application of computer network technology. However, due to the complexity and virtuality of computer network itself, it is easy to cause some network security problems. In addition, due to the rapid development of computer network, some laws related to computer network security have not been updated and improved in time, and the application of laws to maintain computer network security is also facing some great difficulties. Therefore, it is necessary to strengthen the establishment and improvement of laws and regulations on computer network security and build a peaceful, safe, open, cooperative and orderly cyberspace.

1. Introduction
Nowadays, we are in an era of rapid development of computer network technology. Moreover, the security of computer network technology has become a hot topic of discussion. It must be said that the development of computer network has made an indelible contribution to the development of the world. The development of computer network has made the earth a global village, which has brought convenience and development opportunities to more people, and also brought new challenges and risks to people. Computer network security is closely related to our daily work and life, and now it is an urgent problem for every country to break through.

2. Legal problems caused by unsafe computer network
In the virtual computer world, computer networks may be attacked by hackers all the time, resulting in information leakage. Therefore, if no one maintains the computer network, it will lead to the complete paralysis of the computer network, and make some criminals master important information, which will have a great impact on the country and society. Nowadays, the computer network security is destroyed, which will also threaten people's production and life, for example, bank cards are stolen or personal information is leaked. Therefore, the security of computer network directly affects personal development and social peace. In this regard, the state has also taken some measures to conduct a better review and set up relevant review departments.

Since entering the new century, our country has paid more attention to computer network security. Nowadays, in the process of national and government network operation, the emergence of e-government provides a more efficient way for government departments to work. Therefore, ensuring computer network security has become a necessity in our development process. However, it is a very complex problem to ensure the security of computer network, not only by one person, but also by the
state and government to realize the overall control of computer network. For people, only a safe computer network environment can make people better protect their property. For the society, only a better computer network environment can maintain social stability and peace. Therefore, the government must do a good job in computer network review. Since the last century, China has implemented the review on computer network security, strengthened the construction of network security system, promulgated a series of laws and regulations such as the Network Security Law, established and improved the network security responsibility mechanism, network security review mechanism, network security monitoring and early warning mechanism, and strengthened the security protection of key information infrastructure. Generally speaking, there are laws to follow in the development of computer networks. Because of the rapid development of computer networks, the impact on the country and society is constantly changing, at present, China's computer network security review and maintenance according to law still faces some problems.

Computer network security means that under the control of the state or the government, it can ensure the normal operation of the computer network, and the data and files will not be easily stolen and tampered with. In China, there are two types of crimes committed by computer networks. One is to use computer network as the object to commit crimes, and the other is to use computer network as a tool to commit crimes. Generally speaking, the probability of using computer network as a tool to commit crimes is relatively high. The main way of committing crimes is to attack the computer system directly, paralyze the computer system, then invade the computer system to plagiarize data or tamper with some files, and use aggressiveness to input some dangerous virus programs into the computer. These unsafe factors will cause problems in computer networks and trigger a series of situations.

The specific problems are as follows:

1. It is difficult to determine the criminal boundary of computer network. Computer network crimes cannot be completely equated with crimes in real life. The more common computer network crimes mainly include publishing some untrue information, or maliciously attacking computers, and using computers to evade taxes. These are some illegal and criminal acts that we can see, but this is only one of the unsafe factors of computer networks, and it is also a part of criminal acts. For example, the most common problem is software copyright, which covers a wide range and has great influence. There is no way to solve it completely and fundamentally in a short time, and there is no real regulation for it. Moreover, there is no exact assessment of the extent of piracy, which results in no way to crack down on piracy infringement on a large scale.

2. It is difficult to unify transnational laws at present. The world is a unified global village, but at
present, all countries in the world have not reached an agreement to formulate a unified international law for maintaining global network security. Nowadays, it is no longer a problem for hackers to commit transnational crimes. Transnational crimes directly have a great impact on computer network security, and will also have a great impact on the attacked countries, causing great losses. However, every country has different punishment for this kind of crime, which will cause the fairness of legal judgment. If a certain person is a transnational criminal, because the attacking countries are different, he can't take a fair judgment, so he can't safeguard the rights and interests of victims in different countries.

(3) It is very difficult to obtain evidence for cybercrime. Police officers are the guardians of people's lives, but most police officers can't be fully familiar with the evidence collection of cyber crime, because computer cyber crime is a high-end technology, which causes great trouble for police officers. Although police officers have rich experience, they don't have very sophisticated technology. However, skilled workers have little experience in arresting criminals, so it is very difficult to build the network public security police team, and the whole process will be very slow, which is quite different from the construction of public security police officers in real life. Evidence acquisition of cybercrime is mainly based on computer network. Therefore, the acquisition technology of cyber crime lags behind the development of computer network technology, which makes it more difficult to obtain evidence, makes more criminals more rampant, and violates the rights and interests of many victims.

(4) Some relevant laws are not applicable and sound. The development of computer network technology can be said to be beyond people's imagination, many existing legal documents can not be updated in time, so it is not suitable for the development of computer network technology. Because of the characteristics of computer network, and the scope of computer network crime is larger and more complex than that of criminal crime in real life, it is difficult for the existing legal system to meet the needs of society in time, and it is very difficult to formulate "lagging" laws. Whether the original laws are applicable to today's life, and the observance of unified international laws can not be achieved by a country. Moreover, the revision of laws and the improvement of relevant laws and regulations can not be completed overnight. It is necessary to supplement and improve the original computer network security laws, and it is also necessary to formulate some new laws in the existing environment.

(5) The security situation of computer network development is worrying. In this background, the computer network operators have not established a very strict management system, so in the process of computer network development, almost every link has insufficient management. For example, the main body of the operator is suspicious, and real-name authentication is not implemented, so there is no way to verify some illegal and criminal behaviors, and there is no safety protection measure in the computer network information. In a large LAN, there may be many small LANs, so the middle links in some LANs may be computers or mobile phones, but they are all in a large LAN, so hackers can easily connect them together, and then complete computer attacks and crimes.

3. Establish and improve the legal guarantee system for maintaining computer network security

China's legal system has been basically established now, but China still can't stop in the process of perfecting laws and regulations, because society is making progress every day and our life is developing every day, so we still need to go a long way in perfecting laws and regulations. China is the largest developing country in the world, and it is also the country with the largest population. However, China is still at an initial stage in the formulation of computer network legal security. Computer network crimes in China are relatively few, and the types of crimes involved are not as prominent as those in foreign countries. However, China is the largest developing country with the fastest development in the world, so it is inevitable that computer network crimes will appear in China, and this kind of crime will probably become the largest crime in China in the future. Therefore, we must spend more time to build a more perfect legal protection system from top to bottom.

(1) Establish the goal and principle of computer network legal construction. China is a socialist country, and in the process of its development, it has always adhered to the people-oriented concept of
everything for the people. Therefore, the fundamental purpose of legislation is to protect the peace of life and social stability of our people. The simplest purpose is to protect national security, make people live and work in peace and contentment, and create a more stable and harmonious living environment for the people. The principles and objectives of legislation play a guiding role, and we must never legislate for the sake of legislation. In the face of the interests of the country and the people, we must obey everything.

(2) Create a more civilized network system. To create a more civilized network system, it is not enough from the legal point of view. It is necessary to improve the civilized quality of all netizens and create a more civilized and democratic network environment. Such a network environment is bound to have little space for criminals. Therefore, it is very necessary to purify the network environment, but this job can not be completed overnight, and we must always adhere to the purification of the network environment.

(3) Establish more perfect information security laws and regulations to ensure information security and network forensics. The information security law focuses on the acquisition technology of electronic crime. The technology of obtaining electronic evidence will directly affect the development of the whole computer network technology and the restriction of high-end scientific and technological crimes. Therefore, the government must unite with major universities to train more talents who can complete electronic forensics. In the future maintenance of computer network security, it is bound to become a game between talents. It can be said that in Internet technology, every hacker can be regarded as a genius or a master of Internet technology. Therefore, it is necessary to have relevant computer network technology, and only such talents can obtain electronic evidence. The acquisition of electronic evidence is based on the use of computers, so the technology of electronic evidence acquisition will lag behind the development of computer network technology, which makes it difficult to make a big breakthrough in the technology of electronic evidence acquisition. It also illustrates the importance of this technology.

(4) Focus on building the evaluation standards of cyber crime and cyber security. When building laws and regulations, we should pay attention to the grade evaluation system of illegal and criminal acts of computer networks. When building the evaluation system, one of the main principles is top-down. First, from the national point of view, we should check whether these crimes will cause certain harm to the country and the degree of harm to the country. Then, we should check the impact of these crimes on society and the harm to individuals. According to the level of its harm, it is classified as a crime. At the same time, a safety network evaluation agency should be established according to national standards. It mainly means that the organization will carry out a level test on the users according to the national standards. Computer network security assessment can reduce the probability of network crime to the greatest extent, eliminate some unsafe factors, reduce the workload for network security law enforcement personnel, and make the law more accurate and adaptable.

(5) Give full play to the advantages of big countries and solve transnational crimes. Although China is a big socialist country, we are still in a primary stage of development in the process of development. However, after decades of reform and opening up, China's comprehensive national strength has increased, and China's international prestige is relatively high. Therefore, in the information age, every nation has its own rights and interests, which is also the nature of a country. However, if we want to guarantee world peace, we must establish a unified international law to solve the controversial cyber security problems in the world. Therefore, we should give full play to the advantages of big countries and unite with many countries to complete international legislation. In March 2017, China's Ministry of Foreign Affairs and the State Internet Information Office jointly issued the Strategy for International Cooperation in Cyberspace, which aims to build a community of destiny in cyberspace, comprehensively declares China's policy stance on international issues related to cyberspace, and systematically explains the basic principles, strategic objectives and action points of China's foreign work in the network field. The aim is to guide China to participate in international exchanges and cooperation in cyberspace in the coming period, and promote the international community to work together, strengthen dialogue and cooperation, jointly build a peaceful, safe, open, cooperative and
orderly cyberspace, and establish a multilateral, democratic and transparent global Internet governance system. On September 8, 2020, Chinese State Councilor and Foreign Minister Wang Yi delivered a keynote speech entitled *Sticking to Multilateralism, Advocating Fairness, Justice, Cooperation and Win-Win* at the high-level meeting of the International Symposium on "Seize the Digital Opportunity and Seek Cooperation and Development", and put forward the *Global Data Security Initiative*. Wang Yi said that global digital governance should follow the three principles of upholding multilateralism, taking into account security and development, and adhering to fairness and justice. To cope with new problems and challenges and jointly build a peaceful, safe, open, cooperative and orderly cyberspace, China launched the *Global Data Security Initiative*, and all parties are welcome to actively participate. The main contents of the initiative include: actively maintaining the openness, security and stability of the global supply chain; Oppose the use of information technology to destroy the key infrastructure of other countries or steal important data; Take measures to prevent and stop the use of information technology to infringe personal information, and oppose the abuse of information technology to engage in large-scale monitoring against other countries; Require enterprises to respect local laws and not force domestic enterprises to store overseas data in China; It is not allowed to directly obtain overseas data from enterprises or individuals without the permission of other countries; Enterprises shall not set back doors in products and services. I hope this initiative can provide a blueprint for formulating global rules for digital security. China will work hand in hand with all parties to build a community of digital destiny.

4. Conclusion

In this article, we mainly discuss the hazards of some computer networks under the background of the rapid development of computer network technology, and also discuss that with the development of computer networks at home and abroad, the insecurity of computer networks leads to the continuous improvement and construction of laws and regulations. We must build a more perfect legal and regulatory guarantee system, so as to ensure the computer network security and have laws to follow, purify the development environment of the network, build a more perfect cyberspace system, and jointly build a peaceful, safe, open, cooperative and orderly cyberspace.

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