

Research on Sino - US Cybersecurity Law Enforcement Cooperation

From the Perspective of International Law Enforcement Cooperation

Angang Li

Zhejiang Police College
Hangzhou, China

Yun Chen

Zhejiang Police College
Hangzhou, China

Abstract—With the speeding up of economic globalization, the exchange and cooperation between different countries have become the theme of international relations. The world today is increasingly becoming a close global village. However, the increasing prominent problems of transnational crime put forward a serious challenge to the international security order. In order to protect the common interests of all mankind, to create a safe and harmonious living environment, international law enforcement cooperation has become an important part of international exchanges. As the world's fastest growing countries and the most powerful country, China and the United States are facing a common threat in the field of cybersecurity, and the two countries should launch a comprehensive and in-depth cooperation in the field of combating cyber crime. Therefore, the study of cybersecurity relationship between China and the United States should become a major issue of common concern in academia.

Keywords—China; US; Cybersecurity; Law Enforcement Cooperation

I. INTRODUCTION

International law enforcement cooperation on cybersecurity is the main content that current major powers concerned. China-US high-level dialogue on cyber crimes has been formally established in 2015 and has launched for three times (Zhang 2014). So far, which adopted the "China-US Guiding Principles for Combating Cybercrime and Related Matters", established a hotline mechanism, and carried out the exchange of experience, including network fraud, commercial theft, Internet pornography and other criminal cases.

The international law enforcement cooperation refers to the exchange of law enforcement services between different countries and regions for a certain demand. It is a law enforcement organ in different countries that set to safeguard international order and fight international crimes carry out law enforcement cooperation in accordance with national law or international conventions (Cai, 2012). At present, the world is still in the development process from unipolar to multipolar, where transnational crime, international crime, terrorism and other situation is relatively grim, so international law enforcement cooperation is the only way and inevitable choice for human security. Among them, the

cybersecurity law enforcement cooperation, as an emerging content in international law enforcement cooperation, acquires enormous room for growth.

A. The Connotation of Cybersecurity

Cybersecurity refers to the security of the information and the physical security of the network infrastructure. The latter includes both the hardware in the network system from normal operation, and the software with its data are not maliciously or accidentally changed and leaked, and the entire network system can continue to provide services continuously and uninterrupted (Deng, Deng 2015).

Cybersecurity is an important part of national security, which is different from the traditional sense of national security. Cybersecurity is neither visible nor touchable. Virtual cyberspace broke the physical boundaries of the country and each netizen is the owner of cyberspace.

B. The Characteristics of Cybersecurity

Cybersecurity possesses the characteristics of basic, holistic, initiative and strategic. Regardless of social economic development, or the country's political diplomacy, military activities, they are all closely linked with the computer network. If there is a problem in any point or link in network, the entire cyberspace will face the collapse of the overall situation (Wang 2016).

At present, international law enforcement cooperation on cybersecurity among many countries have been carried out, but most of the them did not make substantial progress, because there is countless competition and game behind the cooperation.

II. SINO- US CYBERSECURITY GAME

Since the establishment of diplomatic relations between China and the United States in 1972, China and the United States have achieved more than 100 dialogue and cooperation mechanism (Liu 2016). However, there is not a comprehensive cybersecurity cooperation system, a sharing platform of law enforcement resources and law enforcement experience, a smooth information exchange mechanism

between China and the United States, that led to a more virtual cybersecurity cooperation between the two countries.

In fact, in the cooperation of China-US network, the strength of the disparity between the two countries determines their relations of cooperation. There is a major sign of anxiety and mistrust between them, and the PRISM of the United States enlarged and exacerbated this impression. For example, there are some 13 root name servers in the world, and the United States possesses 10 of them while China has no one.

The other reason for suspicion is that the two countries have friction in the daily exchanges, such as the 2013 Snowden incident caused a global cyber security panic, in 2014 the United States accused five Chinese soldiers to steal their military intelligence, in 2015 the Lenovo Group was accused of illegal invasion and many more. The trust issues brought about by these frictions have plunged China and the United States into a "prisoner's dilemma". In 2015, China and the United States formally established a high-level joint dialogue mechanism, including the two countries' main administrative departments which carry out network cooperation. The high-level joint dialogue mechanism has so far carried out three high-level dialogue, and the harvest was quite well more in one year.

A. The differences on cybersecurity cooperation

The United States is the most powerful capitalist country, China is the world's largest socialist country, the two have great differences in the political system, economic system, values and other aspects, so the cybersecurity cooperation is often contradictory.

1) Political factors

It is well-known that China's firewall (which is really called the "Golden Shield") has been established for a long time to isolate the potential threat from the global social network platform, such as Google, Facebook, Twitter, etc. Stability in China is almost worshipped, the similar events of the Arab spring is absolutely not allowed to appear.

2) Economic factors

In the cyberspace, the economic conflicts between China and the United States are more frequent, and the protection of intellectual property rights in the economic and trade is one of the main contradictions. The United States has always attached importance to the protection of intellectual property rights, set up a "copyright law", "patent law" and so on, the legal system is more perfect. And China's awareness of the protection of intellectual property awareness is also relatively late, the division of the relevant issues is not clear enough, in place. As a result, the two countries often have contradictions in cases of intellectual property rights.

3) Cognitive differences

In the 1990s, the United States proposed the concept of cyber warfare and realized that the world pattern has gradually changed from industrial war to information warfare firstly, and carried out researches on network warfare. China has not only proposed the strategy in recent years from the "network strength" to "network power",

which requires China to have independent innovation of technological strength, industrial strength and national defense strength, but also improve the ability of network space management (Fang, Hu 2014).

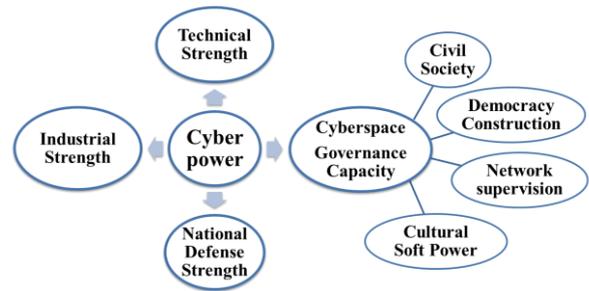


Fig. 1. Network Power Strength Model.

B. Analysis of the Prisoners' Dilemma

With the full rise of China in political, economic, military and cultural fields, the cooperation space between China and the United States is increasing, and in cooperation, the pursuit of their own interests is numerous. If refers to the prisoner's dilemma theory, it is true that China and the United States are not prisoners of interrogation, but there is often a process of mutual game which is similar to the prisoner's dilemma in cooperation.

China-US cooperation is not a one-off event. In order to obtain their own best interest or maximize the collective interests, both sides can choose to trust or deceive to achieve their own purpose at a time, according to the different attitude adopted in the different cooperation, back and forth, the repeated game put on the stage constantly.

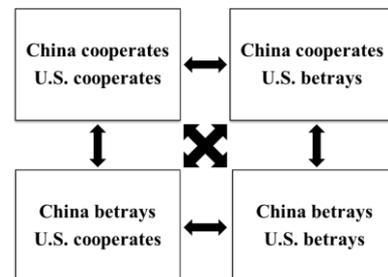


Fig. 2. China and the United States repeated the game diagram

III. SINO-U.S. CYBERSECURITY COOPERATION IN THE CONTROL

A. The Effectiveness of the Current Bifurcation Control Mechanism

The specific concept of Sino-US relations bifurcation began in 2011, it is put forward when Xi Jinping, then vice chairman of the Chinese state, met with the former US Secretary of State Kissinger. Since the diplomatic relations have been established between China and the United States, the establishments of more than 100 dialogue and cooperation mechanisms have witnessed the development of Sino-US relations at different stages. Such as the

establishment of the 2009 Sino-US strategic and economic dialogue mechanism, it is a typical representative of the bifurcation control mechanism. So far, the two countries have held eight rounds of China-US strategic and economic dialogue, and it is one of the important mechanisms the two countries use to enhance mutual trust and consolidate friendly relations. In November 2007, the China-US Internet Forum set up, so far held a total of eight times, is the important platform to promote the Sino-US Internet industry for exchanges and cooperation.

The high-level dialogue mechanism for combating cybercrime in China and the United States is the most direct and youngest mechanism established for cybersecurity. The mechanism was formally established in 2015, until now it has held three high-level dialogues between China and the United States. The establishment and operation of the mechanism to enhance the level of cybersecurity enforcement of the two countries, in order to alleviate the grim situation of the world today to provide an effective online crime. The dialogue mechanism is the first ministerial level of direct dialogue, the high specification of a groundbreaking, milestone significance, the dialogue to create a hotline mechanism can effectively avoid misunderstanding differences arise, help arrange arrangements in time, to develop a combat program. Since the establishment of the mechanism has been effective for more than a year, there has been a marked improvement in the situation in which the status has been unequal and the information exchange has been slowly.

B. The Current Analysis of Bifurcation Control Mechanism's Goal

Casting aside previous unequal cooperation, the high level dialogue mechanism between China and the United States to combat cyber crime is based on the principle of 'law, equivalency, honesty and pragmatism' and devotes to improve law enforcement ability in cyber crime field between China and the US. Focusing on combating cyber crime, enforcement training, strengthening the mechanism construction and so on, China and the US communicate, assist each other in the investigation of key cases and developing action plans. They stroke the cyber hackers and combated cyber pornography crime.

Besides, both sides discovered some network information and related clues about a group of people who advocated terrorism, taught manufacturing weapons and explosives, as well as plotted and executed terrorist attacks by hot lines on time and conducted investigation immediately. Pointing at joint investigation on cyber child pomography crime and evidence evaluation standard, Chinese Ministry of Public Security, FBI and some relevant departments had special discussions, exchange clues and evidence of cases as well as have an intimate knowledge of handling cases' process to promote the successful investigation of the cases effectively.

Though the high level dialogue mechanism between China and the US has made lots of achievements since establishment, we still cannot neglect the defects of it. Despite that the establishment of hot line has provide

convenience to develop cooperation of Internet security between China and the US, they are still lack of a set of specific solutions and information-sharing platform and the hot lines are still not mature enough. In addition, this current mechanism is far from enough for China and the US that want to have long-run cooperation. Cyberspace is changing rapidly. How to combine the features of two countries and withstood the trend still are difficult questions?

C. The Way to Improve the Current Control Mechanism

About cybersecurity issues between China and the United States, we should always adhere to the framework of the establishment of a new type of relations between major powers to cooperate and establish a high level joint dialogue mechanism as the main channel to strengthen exchanges and cooperation, constructively control differences.

First, to enhance mutual trust in the cybersecurity strategy, trust is the premise of cooperation. China and the United States respectively as the network power and power networks, exchanges and cooperation in the network space is inevitable. in the exchanges and cooperation between China and the United States, we need to respect each other's form in the development of production and seek common ground and maximize the cooperation.

Secondly, facing the problem of cybersecurity, the two countries should adopt effective response programs. As shown in Figure 3, when there is a problem between China and the United States in the cybersecurity issues, the first thing to do is to analyze. If the issue involves cyber terrorism, the two countries should promote network cooperation to get mutual benefit and win-win. If it is because the inherent contradictions that can not be resolved, the choice for them is to control differences. If the contradiction is due to the threat of the non-governmental organizations or individuals to the national cybersecurity, they should adopt a cooperative way to strengthen communication, so as to achieve the purpose of solving the contradiction. If it is due to technical problems or cognitive differences that the contradiction cannot be resolved at a time, then they can put aside the contradiction and it can be dealt in the future (Bo 2015).

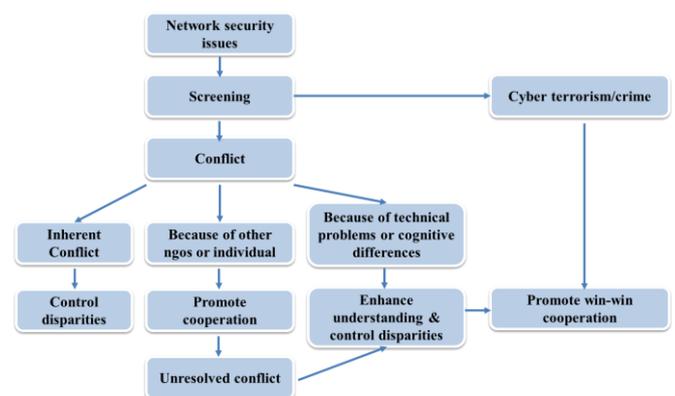


Fig. 3. Cybersecurity problem solving model.

Finally, the two countries need to build an information sharing platform and devote themselves to the development of information technology cooperation. This can be achieved

through the establishment of an effective information sharing mechanism, the hotline mechanism described above for the timely sharing of information between the two sides has taken a good step. The United States has advanced technology, excellent talent and first-class experience, China has the largest Internet market and development potential. The two countries should learn from each other, give full play to their respective advantages, strengthen cooperation and achieve mutual benefit and win-win situation.

IV. CONCLUSION AND OUTLOOK

A. Conclusion

Entered in twenty-first Century, the use of the Internet in the world is rising at an increasing rate, while promoting the development of information technology, the state has begun to take the protection of information security into account. Cybersecurity contradictions between China and the U.S. cannot be eradicated in a short period of time. With a general direction of view, the problem of cybersecurity is always in the overall situation of relations and background between China and the U.S. The mutual distrust is the cause of many remained contradictions in that lie between China and the United States. The cybersecurity problem is also the same. From the current point of view, despite the difficulties, the two internet giants combat Internet crime together and set it as a link, forming a long-term dialogue mechanism, and on some hot issues, they actively exchange their information, eliminate misunderstanding and co-operation. What they have done has promoted the overall level of Internet security. In recent years, the cooperation between the two countries has made great progress in political, economic, military, cultural, educational, and anti-terrorism areas. Although there are still game and friction between the two countries, increasingly normalized cooperation is an inevitable trend.

To maintain the security and order of the network world is the value target of the virtual society and also a shared responsibility and obligation for the governments and regulators, website, network operators and the majority of Internet users. To be effectively governed, any public areas must rely on the joint participation of all stakeholders, in the increasingly normalized moment of international law enforcement cooperation, multinational joint handling mechanism, legislation, technical means are scarce, the high-level dialogue between China and the United States similar to combat network crime and related matters with high level dialogue becomes more and more important. The cooperation between China and the United States in law enforcement effectiveness of the entire Internet to combat crime, will play a model and demonstrative role. In the next few decades, not only the cooperation between China and the U.S., but also the cybersecurity cooperation of all countries in the world, will be more and more frequent with the integration process of the world, law enforcement cooperation mechanism of cybersecurity will also be more perfect.

B. Outlook

Conflict, competition and cooperation are the characteristics of China and US relations in the network, In the network that is not constrained by space, for the country, the unknown signal from another country is often understood as a threat, in order to protect their own interests, the country received a "threat" signal will issue the same "threat" signal, contradictions and difficulties arising from this.

Cyberspace as a new field, its legal regulation has not yet been fully developed, it is possible to break the history of cooperation. Avoiding the "Thucydides trap" is the common pursuit of the two countries. Although there are differences in understanding the issue of cybersecurity between China and the United States, this will not hinder the cybersecurity cooperation between the two countries. For a long time, the two countries will suffer from hackers, Internet fraud, Internet pornography and other network crime problems, the two countries are the biggest victim of cybercrime and they have common interests in the field of cybersecurity which requires the two countries to face it together. Maintaining the stability, safety, health and order of the cyberspace is in line with the common interests of both China and the United States, as well as the common interests of the international community and all Internet users. Now, as two the most influential countries, to carry out a series of cybersecurity cooperation on the basis of mutual respect not only set a model for cooperation and governance of the global network, but also inject new elements when it comes to build new relations among major powers (Zhou, Wang 2013).

The conflict and cooperation between China and the United States in cyberspace is not only a reflection of the relationship between the two countries in the real world, but also affected by the characteristics of the network. China caught many developmental opportunities provided by the network space, the field strength has made great improvement in recent years, but the network power, network space initiative has always been firmly controlled in the hands of the United States. In the next period of time, China will continue to compete with the United States in cyberspace.

REFERENCE

- [1] Bo C. Y. (2015). *Cybersecurity and Sino US relations*. M.A. Thesis. Beijing: Central Party School.
- [2] Cai, C. (2012). Sino US relations in cyberspace: competition, conflict and cooperation. *American Studies*. 03, 117-119.
- [3] Deng G, Deng D. (2015). *Cybersecurity and cyber crime*. Beijing: Law Press.
- [4] Fang X. D, Hu H. L. (2014). *A Powerful Network of Sino US Network Space Game*. Beijing: Electronic Industry Press.
- [5] Liu C. (2016). How much do you know about Sino US bilateral dialogue and cooperation mechanism. *World Knowledge*. 01,58.
- [6] Wang S. Y. (2016). *National security strategy of cybersecurity*. Beijing: Jincheng Press.
- [7] Zhang L. (2014). A new perspective of Sino US cybersecurity cooperation after the "Snowden incident". *Expanding Horizons*. 5, 124.

- [8] Zhou Q, Wang X. F. (2013). The relationship between the cybersecurity and the major powers of the new. *Contemporary World*. 11: 33-34.