Study on the Mechanism of Crisis Information Management of Chinese Government
—— take significant emergent events for example

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Abstract
A variety of significant emergent events occur frequently, make the Chinese government's increasing emphasis on the work of information management. In this paper, takes the "SARS" accident, the Songhua River pollution incident, the "5 • 12" Wenchuan earthquake and "7 • 23" Wenzhou bullet train crash for example, analysis the change of Chinese government's way of crisis information management, and on this basis, this paper put forward the policy and proposals to strengthen the information management of crisis of the Chinese government.

Key words: Chinese government, information management of crisis, significant emergent events, Mechanism

1. Introduction
All kinds of emergencies happen frequently in recent years, causing huge losses on people's life and property and great harm to the country's economic and social construction.

Emergencies refer to those public emergency events happened in social life, which are difficult to predict, have a wide range of effect, and cause great threat and harm to social public areas. Emergencies include sudden disasters and significant emergent events. Significant emergent events are featured on strong destructiveness, time urgency, fast spreading and so on, refer to those unconventionality events that either happen suddenly or are caused by natural or/and human factors and lead to or might lead to a lot of serious casualties, property damages, ecological destructions and great social harms, threatening public security. The relationship of emergencies, sudden disasters and significant emergent events are shown in figure 1. Significant emergent events can be divided into three categories, which are significant natural disasters, accident disasters and public health disasters. For example, the “5•12” event (the devastating earthquake in Wenchuan happened in May 12, 2008) is one of such significant emergent natural disasters. The Songhua River pollution incident in 2005 and "7 • 23" Wenzhou motor car accident in 2011 are significant emergent accident disasters. The "SARS" accident in 2003 is one of such significant emergent public health disasters. Both these disasters had made a great impact on modern life and work.
In early times, when significant emergent events happen, the Chinese government would try to master the relevant information to keep the disaster under control. However, the real effect usually went in an adverse way. Unless it is an abnormal situation, controlling related information would lessen citizens’ confidence in government’s ability of handling crises, which may lead to part of the citizen's unreasonable behavior and would actually intensify the state of emergency in some cases.

Controlling information disclosure has been proved to be inconsistent with effective emergency management, among which, the citizen's behavior is a key factor. When facing an emergency, if the government controls more about the information disclosure, it will lead to less control on citizens’ behavior, which may prevent the government to effectively carry out the work of emergency rescue and subsequent emergency disposal and recovery. As for significant emergent events, establishing an effective crisis mechanism for information disclosure has a great significance to Chinese government’s emergency management.

2. Cases study

“SARS” Epidemic (from 2002 to 2003). Severe Acute Respiratory Syndrome (SARS) is a kind of infectious diseases that have never happened before. In November 2002, the first case of SARS broke out in Foshan, Guangdong. It was firstly found in Guangdong, and then spread to both domestic and overseas. The disease is highly infectious, and its mortality is nearly 10%. In a few months, the "SARS" influenced the whole world. After the first official report about the SARS, all kinds of rumors were intensified.

Water Pollution of Songhua River (in 2005). In November 13, 2005, a petrochemical equipment of Jilin petrochemical, located in Jilin City, exploded, making 100 tons of benzene, nitrobenzene and aniline leak to the Songhua River. In November 25, 2005, the pollution source diffused to the downstream of Harbin City, causing 5 days of water cut-off to nearly 4 million people of Harbin. In the first stage of this crisis, Chinese government had been reluctant to admit that what had happened. Residents of Harbin city were quite skeptical of the news reports of the government. Afterwards, rumors got spread and people started to line up in shops to buy bottled water. Due to the lack of accurate information, the public gradually trust the government less and less.

Wenchuan Earthquake (in 2008). At 14:28, May 12, 2008, an earthquake with magnitude of 8.0 happened in Wenchuan. The death tolls reached 69197 and 18222 people were missing. Wenchuan Earthquake caused as many as 4 million houses to be destroyed or damaged. Despite all the media were reporting this event, there are still some rumors spreading around, which was relatively less. In general, the validity of the information seemed like useful in the stability of people. Through the official information disclosure in mobile phones and the Internet, rumors disappeared quickly. And because the government removed the review on internet, citizens could also ex-
change information through the chat room.

Information related to the earthquake was quickly spread around through the Internet and the service website of micro blog. Users of micro blog could send text and instant messages to share information in the short term. The service could also issue online news. Although the government was monitoring those online dialogues, all of these means provided the first-hand powerful sources of information about the disaster, the pleas for help, or even the fierce criticism about the rescue work. It enhanced the credibility of Chinese public and international news media to the government’s information release and emergency response.

**Wenzhou Bullet Train Crash (in 2011).** At 20:34, July 23, 2011, the Bullet Trains No.D3115 and No.D301 heading for Wenzhou fell off the rail after a rear-end collision happened in the Xia’ao Road of Shuangyu Road, causing a casualty of over 200 persons. The No.D3115 was the train in front, which lost power after a lightning stroke and stopped. The No.D301 was the train followed, which crash the No.D3115 because its control coordination system was out of control. The crash made 6 carriages derail the rail, 4 carriages viaduct fall off the viaduct, 1 carriage hung in the air, and a lot of passengers get injured or killed.

The accident of Wenzhou Bullet Train Crash was preliminary determined as a special and serious accident involving serious consequences. The most crucial problem of this accident is the compensation and truth, because if there is no truth, you will not be able to determine the amount of compensation according to the responsibility. In the process of accident investigation, the Ministry of Railways participated in the investigation as a responsible party, while the as the victims’ family did not join in the investigation as the aggrieved party. But it is true that victims have the right to know the truth. Therefore, the investigation should involve representatives of both parties, as well as the deputies to National People's Congress and the CPPCC (Chinese People's Political Consultative Conference) member. Only in that way can we guarantee the fairness, the impartiality and the openness and ensure citizens to fully get all the effective information on this accident.

### 3. Cases compare

In the past decade, when significant sudden event occurs, Chinese government’s way of information disclosure has changed dramatically. These cases make we be aware of Chinese government’s internal transformation path and know well about the push factors behind.

In these four cases, the public's reaction is under the influence of the information’s quality and of whether the information disclosure under crises situation is useful to the public. The quality of the information does not only refer to how much information the government would like to share, but also refer to the accuracy and timeliness of the information (shown in table 1).

**Table 1:** The openness degree of public information during the crisis

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<td>Information openness</td>
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<td>Information accuracy</td>
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<td>Information timeliness</td>
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During the SARS crisis, the Chinese government intended to conceal important information to the public, underestimated the scale of emergency and the risk to the public, and spent several months before it gave high value to the informa-
tion disclosure. The public soon realized that the information provided by government and the indication given by government are not credible. Citizens then would ignore the government’s instructions and decide to protect themselves from the disease in their own ideas. For example, they would leave main cities with the epidemic, which led to a further spreading of that disease.

Similarly, for the crisis case of water pollution of Songhua River, the local government chose to be dishonest from the beginning and told citizens the truth late. The local government told the real nature of this crisis is partly due to the pressure of the central government, which made the information become more accurate. Citizens and international institutions would regularly inform people about the concentration of chemicals detected in the river.

In the year of Wenchuan Earthquake, this problem appeared again. However, a key thing is that the media played a different role this time. After Wenchuan Earthquake, the central government started to allow media to get into the disaster-hit area to visit without restriction, which is an unprecedented decision. At the same time, the central government also cancelled other restrictions, especially for cancelling the review on network news and communication channels. As a result, by doing this, the media (including international news agencies) can independently collect and reveal relevant information to the public. Compared with the government’s spreading channel, this kind of information disclosure can be more encouraging and cover a wider area.

During the period of Wenzhou Bullet Train Crash, when the accident happened, the issuance on the micro blog made the information timely get spread, and the report of media made the rescue activities get quickly conducted. The state council timely approved to establish an accident investigation team and make adjustment to add members into the team. The further investigation involved field exploration, simulation test, technical evaluation, investigation, evidence collection, comprehensive analysis, expert argumentation and a series of other work. After more than two months of investigation and study, may be due to many technology, management, and other aspects of the problem need to be further in-depth analysis and validation. The accident investigation report has not yet formed.

The government’s information management seems are gradually changing in 2002 and 2011, but there are still some differences between central government and local government and between the government and the media, making the relationship become nervous. For the SARS case, the central and local governments somehow tried to not tell the truth, and most of the media also report and spread the official news without identifying what really happened.

However, in the past 10 years, the methods of information disclosure occurred during emergencies significant changes. The most significant change reflects unprecedented free access to news on the Wenchuan area after the Wenchuan region suffered a major earthquake in May 2008, the central government appears these changes are due to the improvement of transparency and democracy degrees.

4. Strengthening the Government’s Crisis Information Management

Establishing the pre-warning system of crisis information. The pre-warning system of crisis information aims at effectively prevent and the occurrence of crisis and avoid its expansion. A lot of crisis happens with a foreboding sign, and early warning can provide us with a better working condition to gain more precious rescue time. To establish a perfect crisis
information pre-warning system, we shall first collect information, and then use high-end pre-warning monitoring and analysis technology to identify, analyze and evaluate the crisis information and thus to determine the extent of harm, the degree of emergency and the development of the crisis, to make clear about the warning level and, if necessary, to give a crisis alarm. The pre-warning flow chart of crisis information is shown in figure 2.

During the SARS period, because the government had not conduct related pre-warming work of crises information, the SARS virus got unknowingly spread in a very fast speed and made the epidemic had not been effectively controlled.

Figure.2: The pre-warning flow chart of crisis information

Improving the disclosure mechanism of crisis information. Any kind of crisis event is sudden and of a high degree of uncertainty. The key of crisis management is information dissemination. Most of the information involved in the crisis management shall be open to the public, except for some confidential information relevant to national security. Most importantly, the threat and danger of people in the crisis shall be clearly told to the public. Only the real information can correctly guide the public to keep rational and from destructive behaviors in a crisis. It is necessary to ensure the credibility and authority of information and utilize the truth to prevent rumors’ destructive effects. Timely disclosure of accurate information is helpful for the public to coordinate with the government in handling the crisis event, which will improve the efficiency of crisis management.

After the water pollution incident of Songhua River in 2005, the government didn’t reveal the crisis information in time, which resulted in rumors swept through the town and public panicked. It dramatically impacts public life and brings severely negative psychological influence to public as well.

Crisis information’s disclosure mechanism refers to the formal and informal rules related to the disclosure process of crisis information and the combination of operation methods. In general, this mechanism shall be fast and timely, scientific and accurate, legal and reasonable, full of responsibility in management, etc

Exerting the role of media correctly. Media is playing an increasingly important role in government crisis management. The government should set an open as well as enlightened image. They not only highly respect but also kindly treat social media. The key to realize that goal is to respect the principle of news and lawfully protect the journalists’ right of interview, edit and so on. At the same time government need to satisfy and support journalists’ inquisition of truth. The government should realize and attach great importance on the function of media, formulate laws to regulate media. It can help to prevent the transmission of wrong or unilateral information which will mis-
lead or frighten the public. Government can guide the development of social media and make advantage of media to promote the relationship between government and public mutually beneficial.

During Wenchuan earthquake and Wenzhou collision, government makes full use of media resources and advantages to grasp opinion leadership. These measures not only greatly promote the efficiency of crisis management, but also increase the degree of transparency, credibility and democracy of Chinese government.

5. Conclusion

Administrators should fully recognize that information plays a vital role in public crisis management. Timely collecting and analyzing crisis information, taking effective measures and establishing advanced warning system, solving the crisis after it happened is workable ways for preventing, eliminating or easing crisis and mastering the initiative. In addition, it can improve the government image and credibility.

6. References