# Analysis and Thinking on the Safety of China's Exhibition

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#### **Abstract**

Exhibition Industry, also known as the industrial economy, is a barometer of a city's economic development. It plays a huge role in the city's economy, especially in strong promotion of Tertiary Industry and operating of urban brands. With rapid development of China's economic, the exhibition industry grows at the speed of an average 20% - 30% annually. MICE industry brings good economic and social benefits, but it also brings some security incidents and Potential risks. Occurrence of these accidents arouses the concern of the national government departments. In this paper, By understanding the exhibition of the security-related implications and according to various types of security incidents, we analyze the security status of the exhibition and make constructive countermeasures and suggestions.

Keywords: Exhibition safety, safety incidents, accident countermeasures

#### 1. Introduction

In recent years, with the continuous development of China's exhibition industry, China's exhibition industry maintains a high activity and good development trend. In China, the exhibition area is more than 7,000 m2. The annual income is about 2,480 billion and it creates 1900 million jobs. So it has become an important pole of the global exhibition industry. However, due to the impact of a wide range of exhibition industry, high correlation and involving organization's exchange with the outside world in terms of frequent flow, logistics, capital flow, information flow, etc.

It is faced with many security incidents and risks. At September 21, 2007, Premier Wen Jiabao has signed a State Council Order No. 505 and announced the 'large-scale mass activities safety regulations'. Among them, the exhibitions, fairs and other activities are key areas, with particular emphasis on the concrete contractor who is responsible for the protection makeshift facilities, safety of buildings, eliminate security risks. Later, there are some local regulations introduced. So an industry problem leads to the attention of community. Well, now how is status of exhibition security? It is Worthy of considering.

# 2. Define concepts of security and Exhibition

Exhibition is the acronym for conferences, exhibitions (Exhibition, Trade Show, Exposition, Trade Fair or Trade Events etc), large-scale activities such as collective commercial or non- commercial activities. The concept connotation refers to many people gather together to form a regular social activities or mass transfer and exchange of information from time to time, institutional or non- institutional in the certain geographical space. In addition, the extension of the concept includes various types of fairs, exhibitions events, large and small conferences, cultural events, festivals and so on.

The 'security' implies 'no security risk is no shortage of the whole'. Security means that system losses, casualties, the task affected by something or loss of time do not happen through interaction of people, machines and media. Well, exhibition security is meant that Exhibition activity including safety meetings, exhibitions, festival activities and incentive travel exhibition activities, avoids threats from internal and external risks. Good Exhibition activity prevents or reduces the occurrence of safety emergencies, even when unexpected events inevitably occurs, we can limit the hazards and the negative impact to a minimum. If so, we could make exhibition activities run smoothly, ensure exhibition economy to develop continuously and healthily and make the whole exhibition activities be in a risk-free state.

The so-called exhibition security incidents include security risks, signs of exhibition accidents, exhibition and convention disasters. So whether a convention activity is safe and how safety it is, which do not depend on symbols of whether accidents happen and how many accidents there are. Because these symbols can't describe completely security incidents and their effects—during the exhibition activities. Such as congestion problems, traffic accidents, exhibition insect infestation, temporary display structures collapse, equipment damage and injuries. These should belong to the scope of the exhibition accidents.

## 3. Types of exhibition security

By understanding the concepts of security and exhibition, we can divide it into different parts. In the sight of object itself, exhibition security includes personal safety and property security. According to the degree of the accident, there are major incidents and minor accidents. According to the characteristics of the accident, it can be divided into emergencies, uncertain events and urgency events. Depending on the nature of the accident, the exhibition security is divided into five categories: natural disasters, accident disasters, public health emergencies, social security events, network security incidents. This article will describe each of several types from the nature of security incidents.

#### 3.1 Natural Disasters

Factors causing natural disasters have high temperatures, tropical cyclones, heavy rain, dust storms, snow disaster, devastating earthquakes, epidemics. Uncontrollable natural disasters show great impact on safety. In September 2004, the exhibition company CEOs Branch Chong Wang joined in the exhibition in Beijing. Suddenly, the Wang Qiang was thrown sixty-seven meters altitude by the strong tornado, then fell to the ground and was killed. In the evening of April 29, 2006, a big storm affected more than 50 occupants seriously on the Yangtze River road Wal-Mart exit. The wind blew off the ceiling exhibition, many' commodities damaged due to weather.

It is obvious that unexpected changes brought about losses and disasters, especially for display outdoor. Due to the specific characteristics of different objects on display, exhibitors and sponsors must take weather situation into account. For example, for the summer motor show, we should consider the temperature. The light is so strong that it can damage the vehicle body. Certainly, for some fragile items, we need to take more natural factors into account. we can't control natural factors, but if you can take precautions, we can minimize the risk factor. If we grasp at weather information by professional meteorological information service and make the appropriate decisions and judgments by the details of the convention, we will avoid losses generated by unexpected weather and ensure the smooth and effective exhibition.

#### 3.2 accident disasters

Generally, equipment failure, building collapses, traffic accidents, stampede, fire and other accidents should be included in the scope of the disaster. Occurrence of these incidents, more or less, has impact on the safety of the exhibition activities or property. On March 31, 2010, due to the wheel falling off, a scaffolding collapsed in the Hall A, 3.1 HaizhuBazhou Hall. As result, three workers at the top of the scaffolding job were one death and two injuries. On the morning of March 14, 2010, collapse accident occurred in the Guiyang International Conference and Exhibition Center. As result, seven people were killed and nineteen people wounded. On November 29, 2008, there was an accident in Pudong New International Expo Centre Hall E6. In the handling process, a dismantling worker was killed and three people were injured.

The frequency of occurrence of these accidents is less, but they could cause huge harm to the exhibition. In particular, for building and booth construction, in order to avoid accidents, the government implements safety standards On December 1, 2010. This is the first laws and regulations for exhibition.

#### 3.3 Public health security

In terms of public health, food safety and toxic gases endanger personal safety. Ningbo Trade Bureau official told reporters that since 2005, the quality of the food security in china is still not optimistic and is also one of the issues government and the people are most concerned about. The State Council has issued a special document and clearly stated that government will encourage excellent quality, good reputation and high brand awareness in national circulation of food.

In this year, sponsors will continue to host "Food Fair" in Ningbo. They believe that the show reflects the Chinese food level and set example food quality and safety. So they make a decision: Based on last year's "Food Fair", they further strengthen the supervision of food quality and safety for all participating units involved in food production enterprises, businesses and products in the supply chain. On May 21, 2010, 540 false fast foods were checked. In addition, the indoor exhibition booth structures, such as, the use of some substandard wood, contains large amounts of formaldehyde plus the large crowds gathering there. The air does not circulate. So some people feel dizzy, vomiting and other symptoms.

#### 3.4 Social security incidents

Social security incidents is the most reported type of exhibition economy. Like theft, cheating exhibition, exhibition insect infestation, terrorist attacks, the protection of intellectual property, as well as foreign leak emergencies, they belong to the category of social security.

However, theft, cheating exhibition, exhibition insect infestation and the abuses of intellectual property rights occur frequently, which cause great loss of property to the exhibitor. For the abuses of intellectual property rights, according to statistics, in recent years, 25 exhibitions have happened intellectual property disputes among 35 representative and influential exhibitions in Beijing. Mainly in the areas of trademark infringement, patent infringement, number of exhibitions of intellectual property infringement disputes is up to 71% of the total surveyed shows.

For this problem, the four State Intellectual Property Office and other ministries jointly drafted the "IPR Protection Measures" in 2006. It put into effect on March 1, 2006. Some local governments also formulated appropriate laws to protect intellectual property rights. As municipal Legislative Affairs said, "Beijing IPR Protection Measures" was carried out.

The measures established a set of government guidance, the responsibility of organizers and the mechanism of resolving infringement dispute of exhibitors. At the same time, they further defined the responsibilities of government about protection of intellectual property. "Guangdong Patents regulations" was implemented on December 1, 2010, providing a legal basis for IPR protection. In the past twenty years, the Chinese intellectual property legislation has made great efforts and achieved fruitful results, but did not eradicate violations.

For cheat exhibition event, curatorial company called "round side" took advantage of the Canton Fair to cheat 20 million crazily in 2006. In March 2008, swindlers made 350,000 by fabricating false exhibition booth. In May 2010, Taiyuan Edith exhibition disappeared after they cheated more than 150 exhibiting companies. The common occurrences not only could lead to exhibitors' the loss of a part of the property, but also make the exhibitors panic. Through the phenomenon, we can get some conclusion. Because threshold of establishing the exhibition company is not high and market competitive pressure on corporate marketing is fierce, it lead to many and complex exhibitions.

But it still have a certain market. In addition, China's laws and regulations are not perfect, trade management is not in place, as well as the integrity of the market environment and atmosphere is not good. So whether active cheat behavior or passive behavior, there is space for them.

Therefore, the relevant governments and departments take appropriate measures. Zhang Qiang, as a member of China Exhibition Association on theoretical research and general manager of the joint institutions, noted that an important cause of such incidents is the lack of exhibitors' self-protection awareness. So he came up with seven ways to help exhibitors. In Zhengzhou, the government filed system to regulate the construction of various types of exhibitions and prevent the behavior of cheat exhibition. On August 29, 2008, Nanning municipal government issued" Nanning Exhibition Industry management approach" to combat and prevent cheat exhibition events.

The damage of insect infestation and theft on property is not great. However, the frequency of occurrence is very high. Under such circumstances, it would lead to non-professional exhibition and the part loss of well-known enterprises. Therefore, this event will hinder the pace of China's exhibition to meet international brand level. As for the terrorist attack, compared with foreign, the frequency of occurrence is lower in China. But it can't ignore the safety factors of exhibition.

### 3.5 Network Security

With the development of exhibition industry and network technology, network security is increasingly becoming a topic of concern. The so-called online exhibition, namely, is meant to use network technology to hold conferences or exhibitions on the internet. It breaks the limitations of space and time, known as the "never -ending convention". The application of exhibition network is a form of electronic commerce. It can bring products via the Internet to you with more lower cost. Tech Expo, The Canton Fair and local House Fair are trying to build a network platform. Advantages of the network are reflected in the relatively low cost of the spread. In addition, the spread of the organization is relatively simple without regional restrictions, efficient dissemination of results. All in all, the network exhibition has characteristics of low cost, long-term large benefits and small risk. But this open network must have security issues. Security of network devices, security of operating system, security of protocol software and security of monitoring systems have defects. In addition, the vulnerable computer virus infections, data interference, omission, loss, or even who was leaked, tampering, theft, misuse and destruction should be taken into account. Most of these are security risks. For the time being, they almost do not happen, but there are still security risks.

So far, the online exhibition has been in still in continuous exploration, and not formed a stable mode of operation. For network security issues, it is necessary to strengthen the management of the network MICE events, information dissemination, network supervision. If so, we can maintain a good exhibition environment.

### 4. Data Analysis

Based on 400 journals published by China Exhibition Economy Institution, The author analysed and summarized security accidents to account for status of exhibition security in China.

## 4.1Annual change of Exhibition accidents

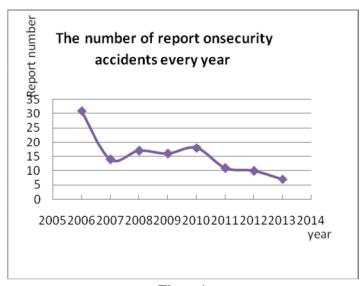


Figure1

The picture shows that security events each year indicate a decreasing trend, because the central government and local governments have taken effective measures and develop the appropriate laws and regulations to improve the level of security incidents. But there is a distance to attain safety standards and requirements of the International Convention.

# 4.2 The types and annual changes of exhibition security incidents

Type	Natural	Accident	Public health	
	disasters	disasters	security	Social security
	(report	(report	(report	(report number)
Year	number)	number)	number)	
2006	4	6	2	19
2007	4	2	1	10
2008	3	1	0	11
2009	3	2	0	9
2010	2	3	0	10
2011	1	2	0	8
2012	0	2	0	7
2013	0	1	0	5
2013	17	19	3	79

Table 1

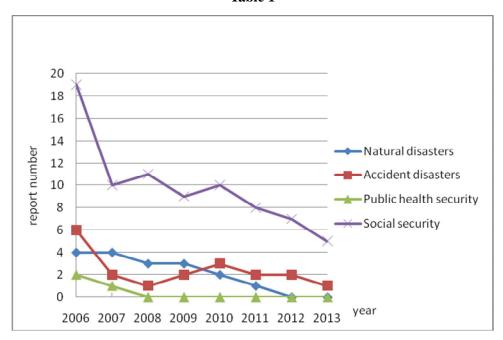


Figure 2.annual changes of exhibition security incidents

From table1 and figure2, we can make a conclusion that each type of accident indicates a downward trend. It means that the situation of security incidents is improving toward the International standard.

Type	Natura	Acciden	Public	Social
	1 disasters	t disasters	health security	security
The proportion of the total number	14.05	15.70%	2.48%	65.29%

Table2

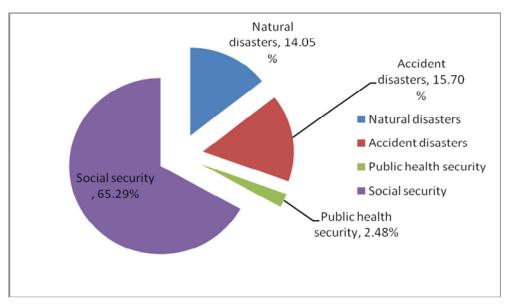


Figure 3

It can be seen that, in Figure 3, the proportion of social security incidents is relatively large, approximately 65%. Social Security is the largest number of incidents and the frequency of occurrence is higher. It is less harmful than natural disaster, but if you do not take the appropriate measures, it will also affect the healthy development of the exhibition industry.

## 5. Thoughts and Strategies

All in all, it can been seen that the status of exhibition security shows lower trends, because the government and society have paid attention to security problems in recent years. In addition, they took appropriate security measures. Such as, the China Association of Exhibition Industry, at the end of 2010, introduced the "safety standards of setting booth and temporary facilities". The State Council, the central government and local governments developed appropriate laws and regulations on the protection of intellectual property. Meanwhile, all the organizers and industry associations together took appropriate preventive measures against natural disasters, accident disasters, social security and so on. Taking China - ASEAN Expo as an example, the pre- fire drills to master fire extinguishers, fire hydrant use, understanding the position of the water cannon, the role of spray facilities, and the use of methods to calculate the correct time every step of the emergency action needed. Secondly, we can develop strategies to reduce the likelihood of security accidents.

Under the constraints of laws and policies as well as everyone's efforts, the exhibition security achieved certain results. But our ideal safety show is far away. In order to be able to quickly reach the international convention security level, I believe that you can start to improve the situation from the macro and micro perspectives.

In the slight of macro, it includes natural, policies, economic, social and cultural. In 2008, snowstorms, earthquakes, financial crisis, in some extent, affected exhibition security, which in fact are inevitable. Firstly, according to the characteristics of events, we can take precautions ahead of time. Secondly, we can vigorously promote the importance of the safe exhibition and set up "Exhibition safe education" course in order to put safety awareness into the social and cultural environment and improve the security system exhibition. For the frequent occurrence, there is a certain relationship with the policies and regulations. Taking building exhibition industry, several domestic structures have collapsed nearly every year. Fortunately, the exhibition has not a stampede. According to professor Wu, the current domestic exhibition buildings, if based on international standards, are unqualified. This phenomenon was a little shocking. In addition, other areas of the exhibition industry are also disordered, and even industry data is not complete. The exhibition lacks of standards including policies and regulations as well as industry regulation. So the government should plan the relevant laws and regulations, strictly implement laws and policies, clearly define responsibilities of relevant departments, establish the exhibition market economy operating mechanism and put the exhibition into the legal system.

From the microscopic point of view, according to the situation of security incidents, there are the main recommendations and strategies in the following.

### 1. Exhibition hall building and booth construction

According to reports of exhibition economy, due to the collapse of buildings and mistakes of booth construction, personal safety and property security have been great harmed. Now design and construction companies put more focus not on structural safety but on profit. So the security of fire exits, the surrounding traffic organization, power facilities, security and facility layout often can't meet the needs of security work. I believe that, in addition to the implement of "safety standards of setting up temporary facilities and booth" and other laws and regulations, it is necessary to let the authorities inspect whether the construction of stadiums is qualified in regulatory requirements, the level of analysis and monitoring of anti- explosion, anti- terror and security facilities and technical standards. As result, you can reduce the security risks related to construction. Secondly, we can make use of the power of the news media to expose the building collapsed. Coupled with the strength of public opinion, it will cause the attention of state and government to help reduce accidents.

# 2. Exhibition safety risk assessment system

Risk assessment refers to the assessment of a threat faced by the show, security risks, the negative effects. In the risk assessment process, there are several key issues to consider. First, we must determine its direct and indirect value of protecting the object. Second, we should consider what the potential threats are and its cause, the likelihood of a threat. Third, which security vulnerabilities could be exploited by threats and what extent of use is. Fourth, once the threat event occurs, it will suffer what kind of negative impact. Fifth, how the organization should plan security measures in order to reduce the risk of loss to a minimum. Risk assessment system, to some extent, is to reduce the loss of uncertainty. Based on it, an exhibition develops appropriate plans. Once an accident occurs, it will clearly respond and take appropriate measures to deal with according to the different types of emergencies.

### 3. Build Exhibition Safety Management System

The purpose of the exhibition is to protect the personal safety and property security. Well, first of all, managers should establish a clear organizational structure and job settings and give a clear mandate to the Security Department to ensure the safety of the exhibition. Second, managers plane security and fire prevention management and related systems exhibition in the planning, investment, move, live, every aspect of the process of dismantling and other safety measures, which are effective or not. It will affect the security control to the next session. Therefore, the professional exhibition should establish an efficient unified command platform, correctly define exhibition risk, develop comprehensive plans and rescue measures in accidents, improve control process, in order to make the exhibition security management achieve the desired effect.

#### 6. Future outlook of exhibition security

Although our level of exhibition security is still in its infancy, but from the perspective of the development of this decade exhibition, exhibition accidents has decreased. This is the result of efforts of government departments and staff. Thus, I believe that, in the near future, through the improvement of laws and regulations, a clear division of responsibilities and safety awareness, our exhibition will have fewer accidents. We strive to improve level of exhibition security effort toward the standard of international exhibition.

### 7. References

- Feng Zhibin, Sun Chao, Hou zhaomin. Safety management concept of large-scale social and economic activities [M]. Thematic studies, 2005, 64-66
- Liu Dake, Wang Qijing. Exhibition activities [M]. Tsinghua University Press, 2004, 8, 46-51
- Shen Huizhang, Investigate large-scale cultural and sports activities on a commercial site [J]. Chinese security, 2006, 21 33-35
- Wen Qing, China Exhibition Venues Management Mode[J]. Theory and practice, 2003, 3,72-75
- Wang Yunxi . Exhibition Management [M]. Shanghai Jiaotong University Press,2004,8,53 -68 http://www.cce365.com/kcnews\_detail.asp?id=753
- XuYao, System Management about modern exhibition services [J]. Shanghai Quality ,2006,5,57 -59
- Cheng Hong, trends in the world economy and the exhibition and references[J]. Economic Review, 2001 (9): 29 30
- Gu Yinan, manage emergencies for exhibition industry [J]. International Business Studies, 2005 (1): 56 59
- Li Zhigang, Study of international conference on Security Management [J]. Tourism Tribune, 2004 (3): 73-74
- Li Ruipeng, major accident risk management about program of social activities and methods [J]. Journal of Natural Disasters, 2007,16 (4): 157 163
- Ye Minghai, Weiqi. analytical framework about large crowd gathered and dispersed exhibition activities of complex systems [J]. Dalian Maritime University (Social Science Edition), 2006,5 (3): 88 92
- Xu Aiping, Lou Jiajun. the reasons for the government management deficiencies in the development of China's exhibition industry [J]. Beijing International Studies University (travel edition), 2008 (1): 75-79
- Liu Deyan, draw international operating to develop Chinese convention and exhibition industry [J]. Dalian University of Technology, 2005 (2): 64 66
- Tang Jincheng, expansion strategy on exhibition insurance [J]. China Insurance Management Personnel Institute, 2004 (5): 25 27 Nine persons per square meter without accident and eight tactics to crack the world's problems [N]. Guangzhou Daily, 2008, 02-26 (5).