

Challenges and Development Path of China's Intelligent Emergency Industry

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Abstract: As a favorable support force for emergency management, the innovative development of emergency industry is crucial to promote the construction of intelligent emergency. The national requirements for security in the new era make the emergency industry enter a period of vigorous development. However, from the current situation of emergency industry development, there are still many shortcomings, such as the lack of professional and technical talents, insufficient capital support, weak independent innovation ability, imbalance of industrial structure, insignificant industrial agglomeration effect, and the international environment affecting the contradiction of supply and demand, which cannot add momentum to the development of wisdom emergency. Therefore, it is necessary to improve industrial agglomeration, optimize industrial structure, accelerate talent training, strengthen international cooperation, etc., to create a wisdom emergency industry and promote the development of wisdom emergency.

Keywords: Intelligent Emergency Industry; Intelligent Emergency; Development Status; Industrial Structure

1. Introduction

With the rapid development of China's economy and urbanization, disaster exposure has increased, and natural disasters, public health events, and social security incidents have occurred and become more threatening, posing a more severe test of public safety and even national security. One of the core modernization of emergency management is to strengthen risk prevention work, to resolve or mitigate various risks and their hazards, so as to greatly reduce various losses. The emergency industry can effectively guarantee the safety of life and property of the country and the people. For this reason, the country has placed the construction of emergency industry system in an important position^[i].

In 2014, the government issued the Opinions on Accelerating the Development of the Emergency Industry, which pointed out that it supports the innovation and research of the emergency industry, encourages industrial agglomeration, accelerates the development of relevant laws and regulations and other initiatives, and clarifies the development direction of the services of emergency products; in 2018, the Guidance on Accelerating the Development of the Security Industry issued by the relevant part of the government pointed out that it is necessary to take enterprises as the main body, market-oriented, and strengthen government In 2018, the Guidance on Accelerating the Development of Security Industry issued by the relevant parts of the government pointed out that we should take enterprises as the main body and the market as the guide, and strengthen the government's guidance, and focus on promoting the innovative development and agglomeration development of security industry. Through the introduction of a series of policy documents, China attaches great importance to the construction of the emergency industry, and the emergency industry has been developed rapidly with the support of policies^[ii]. However, in the context of the construction of smart cities in the new period, the emergency industry has exposed many shortcomings and has put forward better requirements for the emergency industry, and it is of great significance to summarize the development status of the emergency industry and propose methods that are conducive to the high-quality development of the emergency industry for the construction of smart cities and safe China.

2. Realistic requirements for the construction of intelligent emergency industry

2.1 The unexpected event pressed the shortcut key

The complex and changing public security situation in China poses a challenge to the development of emergency industry. At present, China is in a period of rapid development, with higher probability of occurrence, greater destructive power and stronger influence of various emergencies, the security situation is complex and severe, and the difficulty of prevention and control is increasing^[iii]. The organic combination of the Internet, big data, intelligent auxiliary decision making and emergency industry has gradually realized early warning and intelligent rescue of natural disasters and improved human response to natural disaster risks, which requires that the development of emergency industry must be accelerated in order to achieve the purpose of improving emergency response capacity of emergencies.

2.2 The catalyst of smart city construction

At present, as one of the main objectives of the development strategy of "Safe China", smart city has become an important strategy for urban form and urban development and construction. The outstanding feature of smart city is to guide the change of city development by science and technology, break through the traditional city construction and development mode, and realize the standardization, precision, intelligence and scientific development of the city by internet and big data. The rise of smart cities makes the smart emergency industry conform to the needs of the times and produce emergency equipment with prevention and rescue, while realizing the needs of government, society, and individuals for emergency services with the help of emerging technologies such as big data^[iv].

2.3 The need to accelerate the construction of emergency industry system

At present, China has not established risk assessment and hidden danger screening models in emergency response, the cost of time is still higher than the cost of rescue, the technology and equipment level of emergency rescue is low, and emergency rescue expertise is also relatively lacking^[v]. Therefore, it is urgent for China to improve the intelligent emergency industry management mechanism, establish a national-level emergency industry management system, and improve the independent innovation capability of emergency core technologies. To comprehensively improve the ability to prevent and respond to emergencies, the key to building an emergency management system depends on the support of emergency industry.

3. Practical challenges of smart emergency industry

3.1 Lack of professionals

From the perspective of emergency industry, the lack of emergency talents mainly includes these aspects. Firstly, there is a lack of personnel for R & D of emergency equipment, which is mainly due to the lack of a perfect discipline education system, resulting in a serious shortage of R & D personnel; Secondly, due to the lack of strict training, emergency industrial production personnel often transfer temporary personnel from relevant units in the actual emergency work. The development of the emergency industry needs high-level research talents, and the vigorous growth of the industry needs a large number of skilled industrial workers. Therefore, it is urgent to speed up the training of professionals in the emergency industry.

3.2 Unbalanced industrial structure and insufficient positioning of the industry

The emergency industry is generally inadequate in positioning itself, which does not meet the needs of the situation. For example, due to the influence of the traditional concept of "emphasizing rescue and neglecting prevention", most of the emergency industry produces rescue equipment instead of relying on new technologies such as big data to produce intelligent emergency equipment, such as small monitoring UAV equipment. There are also some enterprises with strong financial strength and strong scientific and technological innovation ability that produce more achievements and can get relevant policy support. However, small emergency management enterprises that are in the early stage of development and have insufficient technical and financial resources have multiple difficulties in the transfer of production factors and industrial transformation and upgrading^[vii].

3.3 Weak industrial agglomeration effect

In the big data environment, it is an inevitable trend for the healthy development of the emergency industry to promote the integration and agglomeration of the scale, industry and geographical distribution of the wisdom emergency industry in the national regions, but due to the large disparity in the development level of each region the industry, academia and research cannot be deeply integrated due to various reasons leading to the development of the wisdom emergency industry in some regions is still in and has been in the planning stage, the industrial elements are still scattered, the industrial agglomeration effect is weak, and it is impossible to form a large national key emergency industry agglomeration area and emergency industry demonstration base^[viii].

4. The development path of intelligent emergency industry

4.1 Adhere to the government-led, market-led policy direction

The development of emergency industry should adhere to market-led, government-led, give full play to the decisive role of market allocation of resources, improve the development of government policies and systems on emergency industry, strengthen macro guidance and policy incentives, simplify and decentralize government, and use the reform approach to mobilize the enthusiasm of market players to develop emergency industry. We should adhere to the innovation drive, cultivate market demand with consumption potential, promote the application of emergency products in key areas and key industries, and form a strong pull for the development of the emergency industry.

4.2 Strengthen international exchange and cooperation

First of all, we should strengthen the international exchange and cooperation of the wisdom emergency industry, actively explore international cooperation opportunities in key areas of the emergency industry, and promote and advocate the cooperation and exchange of the "Belt and Road" emergency industry. Encourage the import of foreign advanced emergency technology and equipment, guide foreign investment into emergency industry-related fields, and organize bilateral or international forums, exhibitions and trade and investment promotion activities^[ix]. Secondly, we should accelerate the integration of the wisdom emergency industry with the international market, promote the international development of the wisdom emergency industry, promote the wisdom emergency products and services to the international market, establish the special brand and image of the national wisdom emergency products, and enhance the ability of China's wisdom emergency products in the international community's crisis response.

4.3 Optimizing industrial structure and industrial positioning

Optimize the structure of the emergency industry, clarify the development direction of emergency products and services on the basis of insisting on the demand pull, find the development orientation of the emergency industry, continuously optimize the structure of emergency products, improve the quality of emergency products, promote standardization and characteristic development, and guide enterprises to provide integrated and comprehensive solutions. Set up the development concept of the combination of war, take effective measures to accelerate the development of emergency rescue and emergency supplies, emergency recovery and other emergency services closely related to life and production.

4.4 Accelerate industrial clustering to create industrial clusters and demonstration bases

Strengthen the planning layout, guidance and services of emergency industry, and form a number of national emergency industry demonstration bases relying on the existing capacity and resources of national reserves and advantageous enterprises. We should speed up cooperation with relevant departments to build industrial clustering platforms and give priority to enterprises with good emergency industry foundation, strong scientific research strength and sufficient innovation power to take the lead in building demonstration parks for wisdom emergency industry. According to the actual operation of various types of wisdom emergency industry, coordinate planning, effectively integrate production, technology, logistics and other resources, give full play to the comparative advantages of each industry, and accelerate the emergency industry agglomeration.

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