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### Reflections on Future Space Legislation in China

Zhao Haifeng  
Harbin Institute of Technology, China  
zhaohaifeng\_c@yahoo.com.cn

Wu Xiaodan  
Harbin Institute of Technology, China  
wuxiaodan\_rain@yahoo.com.cn

#### ABSTRACT

Since the creation of China's space industry in 1956, the China's space undertaking developed widely and deeply and has been an important part of world space endeavor. In 1981, China became a formal member of CUPUOS and its two subcommittees—the Scientific and Technical Subcommittee as well as the Legal Subcommittee. Thenceforth, China has taken an active part in both technical and legal work under the framework of U.N. Furthermore, China, respectively in 1983 and 1988, acceded to the four main Space Treaties: the Outer Space Treaty, Rescue Agreement, Liability Convention and Registration Convention. In order to fulfill the responsibilities and obligations under the international treaties and strengthen the macro-management on space activities, China National Space Administration (CNSA), as the appropriate authority of China's space activities, has established and enacted some space industry regulations, including: Registration and Management of Space Objects, Management of Launch License of Civil Space, Management Regulation on Special Projects of Civil Space, and Technology Policy for Space Industry. However, as a space-faring country, these national legislations are disproportional to the development of China's space industry. In order to develop its space industry according to the laws and regulations, China is determined to enhance the construction of space legislation. Currently, some regulations, such as Management of Space Activity, Management of Damage Compensation of Launched Space Objects, Management of Space Commercialization and Coordination of International Space Cooperation, are under research and to be promulgated. Moreover, a comprehensive legislation on outer space activities is under preparation. Since we are doing the project on the comparative studies of national legislations, we would give some suggestions for the future Chinese legislation on outer space in the process of the project, the purpose of this paper is to introduce the existing national space legislation in China and contemplate on possible provisions of future outer space regulations.

Since the creation of China's space industry in 1956, China has played a key role internationally in space-related endeavors, having achieved great progress in space technology and in its application. However, as a space-faring country, the status of China's national space legislation is disproportionate to the development of China's space industry. This is due to several reasons. The aim of this paper is to analyze the necessity and feasibility of prospective China space legislation and to provide some suggestions and guidelines related to future space-related legislation.

### I. Necessity

The importance of national space legislation has been gradually acknowledged by individual nations and international bodies. The resolution adopted by the UN General Assembly in 2004 explicitly recommended that states conducting space activities, in fulfilling their international obligations under the United Nations treaties on outer space, consider enacting and implementing national laws authorizing and providing for continuing supervision of the activities in outer space of non-governmental entities under their jurisdiction.<sup>1</sup> In China, there is now frequent appeal for strengthening space legislation. The drive for China's space legislation is based on the following:

1. To satisfy the need of increasing space ventures and undertakings. As a space-faring country, Chinese space activities need be regulated by law, which is the basic requirement of a nation ruled by law. In all space activities--- space technology, space application, or space science---many issues must be regulated and promulgated by uniform laws. Most of the space-faring countries (almost 20 to date) have promulgated space law to govern space activities and affairs. The countries include the following: U.S.A., Argentina, Australia,

Belgium, Brazil, Canada, Chile, France, German, Italy, Japan, Norway, Russian, South Africa, Spain, Sweden, Ukraine and United Kingdom.<sup>2</sup> Some other countries are preparing their national space legislation. China is one of the rare space-faring nations without national space law.

2. To fulfill international obligations and responsibilities under international treaties. According to international law, States parties to a treaty are under a duty to implement the terms of that treaty within their national legal system, and national legislation is among the most chosen means to implement international obligations. China acceded to the Outer Space Treaty on December 30, 1983; the Liability Convention and Registration Convention on December 12, 1988; and to the Rescue Agreement on December 14, 1988. Some terms of these international treaties explicitly demand to be implemented by national legislation. Others need to be enacted by clear and detailed national rule because they do not provide detailed rule on implementation. Therefore, there is a necessity to transform international treaties into domestic law in order to implement international engagements.

3. To solve a series of problems arising from the rapid development of space activities in a market economy. The framework of UN space treaties was drafted when States were the only player in outer space and the aims and objects of space activities were limited to politics and military motives. However, the recent trend of space commercialization and privatization has swept across many space-faring nations. China's space industry, which was founded during a planned economy period is undergoing great changes under a more market-based economy environment. The subjects of space activities are transforming from the unitary state-owned entities under one system to various market economy subjects coming from a different

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<sup>1</sup> Paragraph 1 of 59/115 Resolution adopted by the General Assembly in 10<sup>th</sup> December 2004, Application of the Concept of the "Launching State". A/RES/59/115.

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<sup>2</sup><http://www.unoosa.org/oosa/SAP/act2005/nigeria/index.html>, last visited on 9th September, 2006.

system;<sup>3</sup> different contractual relations arising from these subjects; the rights and duties relations and legal responsibilities need to be further confirmed between the governmental sectors, governmental sectors and market subjects, market subjects conducting space activities. The commercialization trend comes up in China space industry, especially in the space application field. Therefore, the government must regulate market entrance, commercialization management, space environment protection by legal means and strengthen the macro-management on space activities.

4. To satisfy the need of international cooperation. During the past 30 years, China has made great achievements in international space cooperation. The methods of cooperation are not only bilateral, but also multilateral and even regional cooperation---including commercial launching service. One thing in regional cooperation worthy of mention is the signature of the Asia-Pacific Space Organization Convention and the prompt establishment of Asia-Pacific Space Organization.<sup>4</sup> The numerous problems involved in international cooperation need to be regulated by law, including: intellectual property, the transformation of technologies, the license of importation and exportation, tariff supervision, and foreign exchange management. Some important diplomatic and political issues, including preserving state secrets, maintaining international peace and security, and conforming to international arm control, also need legal regulations.<sup>5</sup>

## II. Feasibility

Conditions are now in place for Chinese space legislation, which are detailed below:

1. The UN space treaties, principles adopted by General Assembly and other national space laws can be used for reference. During a 10-year period following the 1950s, five international space treaties were adopted in the framework of the United Nations and five principles related to space application were adopted by the General Assembly. China has acceded to or approved most of these treaties and principles and has a duty to implement these provisions, among which some rules have become international customs. China should respect these international customs, as they are part of China's legal obligations and framework. The 20 national space laws are significant materials that can be used for reference, which China should seriously consider.

2. China's space policies, space regulations, administrative ordinances, and section rules provide a solid foundation for national space legislation. China has conducted a great deal of space activities and has formed a series of policy, regulations and ordinances.

### (1) Space Policy and management provisions.

A. Chinese space policies are embodied in the White Paper of China's Space Activities published by the Information Office of the State Council on November 22, 2000.<sup>6</sup> The White Paper expressed the policies, position and viewpoints of the Chinese government in the space field and is the authoritative document of Chinese space undertaking. The White Paper has explicitly put forward that the State will strengthen legislation work and policy management, enact laws and regulations and promulgate industrial policies for the space industry to ensure orderly and standardized development of space activities.

<sup>3</sup> For example, the Harbin Institute of Technology launched a small satellite in 2004.

<sup>4</sup> <http://www.npc.gov.cn/zgrdw/common/zw.jsp?label=WXZLK&id=350740&pdm=rdgb>, last visited on 9<sup>th</sup> September, 2006.

<sup>5</sup> He Qizhi, Huang Huikang, *Outer Space Law*, Qing Dao Press, 2000, p. 250.

<sup>6</sup> Chinese edition see: <http://www.china.org.cn/ch-book/hangtian/2000guo.htm>, last visited on September 8, 2006. English edition see: <http://www.unoosa.org/oosadb/showDocument.do?documentUId=360&level2=none&node=CPR1970&level1=countries&cmd=add>, last visited on September 8, 2006.

B. From the creation China's space undertakings in the 1950s through 1996, China has gained valuable experience in space technology management and international commercial launching service and has achieved effective management systems. At present, there are more than 300 rules and standards documents which relate to every respect of space activities. All of the above constitute the basis of China's space legislation.

## (2) Space Legislation.

Space legislation can be divided into two parts: civil space legislation and military space legislation:

A. Civil space legislation. China National Space Administration (CNSA), established in 1998, has attached much importance to the research of space legislation and has gained a series of achievements in promulgating space rules. CNSA and the Ministry of Foreign Affairs (MFA) pronounced the Provisions and Procedures for the Registration of Space Objects on February 8, 2001, which was entered into force on that very day. It is the first administrative regulation on space activities in China, which is in line with the Registration Convention and the practical situation in China and also relatively easy to operate as an institutional regulation.<sup>7</sup> Interim Provisions on License for Civil Space Launching Projects was officially pronounced in the form of a departmental regulation by CNSA on November 21, 2002, and entered into force on December 21, 2002, which established the license management system on the launching non-military spacecraft into outer space from Chinese territory. CNSA and the Ministry of Finance pronounced the Management Provisions on Civil Research Projects concerning National Defense Science and Industry on August 18,

<sup>7</sup> See: Liu Xiaohong and Wang Xiaoqing, The first administrative regulation on space activities in China, in Proceedings United Nations/International Institute of Air and Space Law Workshop on Capacity Building in Space Law. ST/SPACE/14. Office for Outer Space Affairs, United Nations Office at Vienna. 2003. p107.

2002, which provided legal rules on the science and research activities on the technology development of civil space activities and military transforming to civil function in the field of national defense science and industry which is financially supported by Ministry of Finance. The other related administrative regulations, such as Provisional Regulation on Liability for Damage Caused by Space Objects,<sup>8</sup> the Management of Space Commercialization and International Space Cooperation and Coordination, are in the process of research and drafting.<sup>9</sup>

B. Military Space Legislation. Military space legislation primarily includes:

a. Regulations of PRC on the Administration of Arms Export promulgated by State Council and Central Military Commission on October 22, 1997, which entered into force on January 1, 1998, and was amended on October 15, 2002. The regulations provide that the arms export should obtain license and was conducted by the arms trading companies designated by the Government. The arms export programs shall be examined and authorized by the authority of China's arms export or together with the related sectors of State Council and Central Military Commission. The Part Eight of The Military Products Export Control List, which promulgated by CNSA and the People's Liberation Army General Armament Department on November 1, 2002 and entered into force on November 15, 2002, is Rockets, Missile, Military Satellite and its Auxiliary Facilities relating to military space products.

b. The State Council pronounced the Regulation of the People's Republic of China on Export Control of Missiles and Missile-related Items and Technologies and

<sup>8</sup> Yin Wenjuan, China's Space Policy, in Proceedings United Nations/Republic of Korea Workshop on Space Law, United Nations Treaties on Outer Space: Actions at the National Level, ST/SPACE/22, Office for Outer Space Affairs United Nations Office at Vienna, New York 2004, p.15.

<sup>9</sup> CNSA, China's Space Activities, 26<sup>th</sup> April 2004, Bulletin of Space, China Space Law Association, April 2004.

the corresponding Export Control List of the Missile and Missiles-Related Items and Technologies on August 22, 2002, the aim and objects of which is to safeguard the national security and public interests and limit the proliferation of weapons of mass destruction by the means of export control.<sup>10</sup>

In summary, actual Chinese space legislation is limited and in lower layers of the legislation mechanism. Therefore, in a strict sense, there is no real space law.

3. The related research has provided theoretic support for national space legislation. The Chinese Space Law Association and CNSA have made great efforts in space law research for preparing Chinese space legislation. For example, the Chinese Space Law Association has undertaken the project of Research on China's Space Legislation Mechanism and Comparative Studies on the Main National Space Laws.<sup>11</sup> The CNSA has organized the translation of the national space laws and has made plenty of preparation for the national space legislation. Furthermore, some textbooks and papers on space law have been published in international law academic circles.<sup>12</sup> All of these have provided a theoretic basis for China's space legislation.

### III. Legislation Path

The hierarchy of the Chinese law is determined by its respective legislative bodies.<sup>13</sup> In first position is the Constitution adopted by the National People's Congress, which has the most authoritative effect. No law or regulation can contradict the Constitution. In second position are the

laws formulated by the supreme power organ of authority – the National People's Congress and its Standing Committee. In third position are the administrative laws and regulations promulgated by the State Council (the highest organ of state administration), which must be in accordance to the Constitution and cannot contradict the law. Finally, in fourth position, is the departmental regulation formulated by the Ministries and Commissions of the State Council in accordance with the aforementioned legal norms within the limits of their authorities. The legislative mechanism constitutes a tight hierarchal system. Generally speaking, it is easier to adopt a departmental regulation and more difficult to formulate administrative law and it is more and more difficult to pass law, which takes longer time.

Space legislation, especially a comprehensive law on space activities, is a long-term and difficult task. Although China has a good basis for space legislation, the more reliable method is advancing progress step-by-step according to the degree of need and emergency. In order to push the progress of legislation, the most important element is in realizing the necessity of space legislation. In the field of civil space legislation, we think the appropriate path is to formulate departmental regulations firstly, then the comprehensive administrative regulation. Then, try to put the space legislation on the agenda of national legislation plan and adopt a comprehensive space law and, then finally establish a systematic and comprehensive space law mechanism.

### IV. Guideline and Main Content

The guideline of China's space legislation should be as follows: 1) maintain a balance between the national interests and international engagements. China should prepare its space legislation according to the situation of China's space activities and the provisions of the international treaties China has acceded to and should use the other national space law as reference; 2) promote the development of space undertaking,

<sup>10</sup> See Gao Guozhu, *The Present Situation, Evaluation and Prospect of China Space Legislation*, The Proceeding of Seminar on the Present Situation and Prospect of Outer Space Law, August 31<sup>st</sup>- 1<sup>st</sup> September, 2006, Harbin, pp.138-139.

<sup>11</sup> See the CNSA Research Report, *The Comparative Studies of the Main National Space Laws in the World*, July 2003.

<sup>12</sup> Written by Macro Pedrazzi, Zhao Haifeng, translated by Wu Xiaodan, *Textbook of International Space Law*, Heilongjiang People's Press, August 2006, p. 191.

<sup>13</sup> Zhu Yikun, *Concise Chinese Law*, Law Press, China, 2003, p. 12.

including space commercialization; 3) promote international cooperation. 4) The content of the legislation should be based on the present system but should also try to establish some new regimes or to reform the actual system, not only taking into account the present situation, but also with foresight to the future.

Regulation on Space Activities under the process of formulating and the future space legislation should firstly incorporate the provisions of the UN and other related international treaties China has acceded. In accordance with the national space legislation throughout the world and China's international engagements and reality, the following aspects are necessary:

1. The aims and objects of space legislation. China's space legislation should promote the development of Chinese space undertaking, explore and use outer space for peaceful purposes, protect China's rights, perform international duties and promote international cooperation according to the related provisions of Constitution and laws.

2. The authority of space activities and its functions. Presently, several state departments supervise space activities and the relationships between them are not so clear. Therefore, it is an important task to define the powers and responsibilities of government organs responsible for the space activities.

3. The entrance systems of space commercialization. Article VI of Outer Space Treaty provides that States Parties to the Treaty shall bear international responsibility for national activities in outer space, whether such activities are carried on by governmental agencies or by non-governmental entities. The activities of non-governmental entities in outer space shall require authorization and continuing supervision by the appropriate State Party to the Treaty. It is becoming increasingly apparent, that the commercialization trend of launching space objects activities in China and the subject of space activities is becoming multiplex, even non-state-owned enterprises are participating in commercial launching activities. Therefore, it is very necessary to adopt a licensing system for

space activities by legislation and put into effect the entrance systems for space commercial activities.

4. Industrialization management. China has ascended to the forefront in some important space technology fields, but the legal environment of space activities has lagged far behind. It is an emergent need to adopt laws to regulate the plan and development of space activities, the investment managements, commercial launching service, satellite remote sensing, satellite telecommunication and broadcast, satellite navigation location and promote the rapid development of space activities.

5. Intellectual property. The space laws should explicitly provide protecting intellectual property since it is significant to protect intellectual property in the process of space commercialization.

6. Space objects registration. The Registration Convention to which China has acceded establishes compulsory space objects registration system. According to the provisions, a space object that is launched into Earth orbit or beyond shall be registered. In order to exercise China's jurisdiction and control over the space object both *de facto* and *de juris*, the law should provide the condition and procedure of space objects registration and the legal effects of registration.

7. Rescue of astronauts, the return of astronauts and space objects launched into outer space. China's manned space undertaking has made great strides, which makes this provision more significant. According to the related provisions of Rescue Agreement, it should provide the duties and procedure of search, rescue and return of Chinese astronauts landing out the territory of China by accident or foreign astronauts landing in Chinese territory by accident; or, when the space objects launched by China landing in foreign territory or foreign space objects landing in Chinese territory.

8. National liability and compensation for damages caused by space objects. Under the Outer Space Treaty, the launching state is internationally liable for damage caused by space objects launched by national

government, non-government entities and individual. The Liability Convention articulates the method and procedure of compensation. As the state party to these two international treaties, China should bear the responsibility of damages caused by space objects that China launches or procures launching into outer space. Therefore, the space regulation or law should specify the legal problems of compensation, such as the scope of compensation and the determination of compensation liability, whether there is limit for compensation and the liability division of nation and other liable parties. Meanwhile, compulsory insurance system should be established to protect the national interests.

9. International cooperation. The international cooperation serves a special function in the field of space activities. Outer Space Treaty and related General Assembly resolution all encourage international cooperation. National law should include intellectual property, technology transformation, license of export and import, customs supervision and security system relative to international cooperation. At the same time it should also take into account maintaining international peace and security as well as adherence to the international arms control system.

10. Legal responsibilities. Civil, administrative and criminal responsibilities should be prosecuted according to the situation, whether arising from arbitrarily carrying out space activities or arbitrarily spreading information and causing substantial damages while violating the provisions of space laws.

11. Definition clause. Definitions should be explicit and provide the necessary content for terms, e.g., "space activities," "launching states," etc.

The need for space legislation in China is becoming more and more urgent. China possesses the conditions for adopting space legislation. We firmly believe that Chinese space legislation will be gradually established and become more complete.