

The Indonesian Space Act

Pristine Entrant in the Asia-Pacific Region

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Abstract

In the Asia-Pacific region India, China, Japan, South Korea, Australia and some others have been major space players; whereas Australia, Japan and South Korea has enacted its national space legislation.

Indonesia has also ratified international space treaties. For future development of space activities including commercialization of space activities the Republic of Indonesia on 6th August 2013 promulgated its Law on Space Activities.

This paper is in two parts wherein the first part discusses the international space treaties that establish the scientific basis for national space legislation. In the second part analytical study of the Indonesian Space Act has been done in comparison with the 2013 United Nations General Assembly Resolution (UNGAR) on national space legislation. The paper reflects upon how Indonesia in its pristine Act has addressed the issues of authorization and supervision, liability for damages, insurance, indemnification, registration, environmental aspects and others.

1. Introduction

While major spacefaring Asian countries, are still in the process of laying a national space legislation, Indonesia already has enacted, the Law of the Republic of Indonesia, No 21 of the year 2013, on Space Activities sometimes also know as the Indonesian Space Act. Indonesia is geographically located on the equator between two oceans giving Indonesia a strategic advantage on utilization of space related activities.¹

This paper makes a study of international obligations of Indonesia that necessitated enactment of the 2013 law, and highlights salient features of this pristine Act in comparison with the 2013 United Nations General Assembly Resolution (UNGAR)² on national space legislation.

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1 Preamble to the Act.

2 The 2013 Resolutions (68/74) on recommendations on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space adopted on 11 December 2013.

2. International Obligations of Indonesia

Indonesia has ratified the 1967 Outer Space Treaty (OST) by the Law Number 16 of 2002.³ It has also ratified the 1972 Liability Convention, the 1975 Registration Convention and the 1968 Rescue Agreement by the Presidential Decree number 20 of 1996, 5 of 1997 and 4 of 1999 respectively. The obligations flowing from these treaties necessitated Indonesia to enact its national space legislation.

2.1 International Responsibility for National Activities in Space

The OST establishes an international responsibility for all national activities.⁴ The responsibility is upon the states to ensure that such activities are carried out in conformity with the provisions set forth in the Outer Space Treaty.⁵ By and large State must ensure all space activities whether governmental or non-governmental must be for peaceful purpose,⁶ it does not amount to appropriation of space,⁷ is in accordance with international law⁸ and does not cause any irreversible harm to the environment of outer space.⁹ Furthermore activities of non-governmental entities in outer space require 'authorisation and continuing supervision' which has also been considered as the starting point of discussion about national space legislation.¹⁰ It is not denied that the authorisation conditions can be implemented by other means but legislation will ensure greater conformity, predictability and stability. There are two inherent conditions of authorisation within Article VI i.e. compliance with the provisions of the OST and assurance of the safety of the activity, but States may impose any other conditions as per its requirement.¹¹

In addition to authorisation, Article VI of the OST also requires 'continuing supervision' of non-governmental activities in outer space. The objective being conditions of authorisation including safety and compliance with the OST will be observed not only before an activity has begun but also for the whole duration of the activity.¹²

3 Elucidation of Law of the Republic of Indonesia Number 21 of 2013 on Space Activities.

4 Article VI OST.

5 Article VI OST.

6 Article IV OST.

7 Article II OST.

8 Article III OST.

9 Article IX OST.

10 Hobe, Schmidt-Tedd, Schrogl (Eds.) Cologne Commentary on Space Law, Volume 1, 2009, Carl Heymanns Verlag, p. 117.

11 Manfred Lachs, The Law of the Outer Space Treaty, 1972, Martinus Nijhoff Publishers, p. 122.

12 *Supra* note 10 at 119.

2.2 International Liability for Damage Caused by Space Objects

Article VII of the OST imposes an absolute obligation upon the launching State to compensate a State or whose victims have suffered damages because of space objects launched by the launching State. “Each State Party to the Treaty that launches or procures the launching of an object into outer space , . . . from whose territory or facility an object is launched, is internationally liable for damage to another State Party to the Treaty . . .” The Liability Convention further elaborates the rules of liability.

All space activities are inherently dangerous, constituting a potential threat for all States irrespective of their status as space-faring nations.¹³ Therefore, Liability is imposed upon the launching state to clearly identify the State that is well placed to compensate. “The combined effect of Article VI and Article VII is to ensure that States are both responsible and liable in damages towards other State parties and their nationals for their space activities, specifically through the act of launching a space object, procuring its launch or otherwise providing the facility or launching location.”¹⁴

Thus liability for damage caused by space object is a further reason for enacting national space legislation. State may be held liable for the activities of non-governmental entities. By controlling the quality of operators, States attempt to minimize their liability risk, which is ‘unlimited in time, quantum and territory’.¹⁵ Therefore it will be in the financial interest of the State to seek indemnification or/ and impose mandatory insurance requirements, should a State has to compensate for the damage caused by its private entities which can be guaranteed by way of national space legislation.

2.3 Registration Requirements

A ‘launching State’ has yet another international obligation to register its space object that has been launched into earth orbit or beyond. The launching State must register the space object in its national registry and communicate the information regarding the same to the UN Secretary General.¹⁶ Registration of space object is advantageous for a State that intends to open doors for commercial enterprise. If a holder of authorized activity fails to comply with any of the licensing conditions, State need not to do anything extra to take over such an activity. By virtue of registration, State always exercises jurisdiction and control over a space object that has been launched into outer space.¹⁷ A commercial enterprise will diligently comply with the authorisation conditions if they do not want their authorized space activity to be taken over by the State.

13 *Supra* note 10 at 130.

14 *Supra* note 10 at 128.

15 *Supra* note 10 at 144.

16 Article II Registration Convention.

17 Article VIII OST.

So far Indonesia had procured launch of its space objects but through this legislation it also intends to develop its own launch facility and spaceport located within the territory of Indonesia. The 2013 ‘Law on Space Activities’ is of paramount importance for compliance with Indonesia’s international obligations.

3. The 2013 UNGAR on National Space Legislation

At the 68th session of the United Nations General Assembly during its 65th meeting on 11th December 2013 the Resolution 68/74 “Recommendations on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space” was unanimously adopted. It recommended eight elements for consideration, as appropriate, by States when enacting regulatory frameworks for national space activities, in accordance with their national law, taking into account their specific needs and requirements: (1) scope and application; (2) authorization and licensing; (3) jurisdiction & Control (4) safety (5) continuing supervision of activities of non-governmental entities (6) registration (7) liability and insurance (8) transfer of ownership or control of space objects in orbit.

In comparison with the parameters prescribed by the 2013 UNGAR on national space legislation the subsequent paragraphs analyses the 2013 Indonesia Law on Space Activities (Official Translation September 2016).

4. The 2013 Law on Space Activities

4.1 Scope and Application

The 2013 Act governs ‘Space Activities’ that includes space science,¹⁸ remote sensing,¹⁹ space technology capability,²⁰ launching²¹ and commercialization of space activities.²² The Act applies to launch/ re-entry of space objects including search and rescue of astronauts.

4.2 Implementation of Authorization & Supervision Principle

4.2.1 Authorization Subjects

Generally ‘Space Activities’ in Indonesia are to be carried by the Government Space Agency which is under and responsible to the President of Indonesia.²³ Additionally other Governmental Institutions, Local Government, legal entities and/or the community in coordination with the space Agency may

18 Article 11-14.

19 Article 15-23.

20 Article 24-33.

21 Article 34-36.

22 Article 37.

23 Article 38.

carry out ‘space activities’ in accordance with the laws.²⁴ However commercial space activities may be undertaken only by a legal entity established under Indonesian Law and Foreign Enterprise.²⁵

4.2.2 Authorization Body

The Government of Indonesia is the regulatory and controlling body for all space activities. For every launching facility, the Space Agency is obliged to appoint launching safety officers who are responsible for compliance to the license of space activities or license to launch.²⁶

4.2.3 Authorization Conditions & Procedure

The provisions regarding the requirements and procedures on commercial space activities are to be regulated by Governmental regulations.²⁷ In general space activities are carried out for peaceful purpose by taking into account: national interest; security and safety; development of science and technology; professional human resources on space activities; reliability of space infrastructure; protection and management of the earth and space environment and Indonesian & international law.²⁸

Specifically in carrying out the launching of space vehicle, the operator must fulfill financial guarantee and insurance of space vehicle; consider to minimize the possibility of the accidents and/or jeopardize of the public health or loss of material resulting from that launching; ensure space objects not carry nuclear weapons or weapons of mass destruction, or other dangerous weapon; ensure that launching will not cause any possible threat to national security and contrary with the foreign policy and breach to international obligations; and take into account and comply with the provisions concerning flight safety.²⁹ In the event that the launching is carried out outside of Indonesian territory, the licensee of launching must be in agreement that the Indonesian Government may be waived from liability for any loss.³⁰

4.2.4 Continuing Supervision

Government of Indonesia is obliged to manage and supervise space activities that include regulatory and controlling functions.³¹ It has power to prescribe general policy, technical standards, norms, guidelines and criteria for space

24 Article 39.

25 Article 37(1).

26 Article 53 read with Article 54.

27 Article 37(2).

28 Article 7(2) read with Article 8.

29 Article 35(1).

30 Article 35(2).

31 Article 41.

activities.³² The controlling functions include guidance, training, issuing license, certification, and provide technical assistance in the field of development and operation.³³

A license holder of Space Activities, employees and others must comply with the instructions of the launching safety officer at the launch facilities.³⁴ The launching safety officer on launching facilities has the power to access and examine facilities and space objects and test other equipment of the license holder. He can seek information from the license holder and give necessary directions including directions to terminate the launch or destroy the space object either before or after being launched.³⁵

For violation of the provisions of the Act civil and administrative sanctions can be imposed.³⁶ Criminal sanctions both in the form of monetary fine and imprisonment can be levied for conducting space activities/ launching of a space vehicle/ return of space objects in contravention of the provisions of the Act.³⁷ Furthermore in addition to fine and imprisonment to the officials, Legal entities or corporation are subject to three times fines than those imposed to an individual.³⁸

4.3 Financial Responsibility

Indonesia expressly recognizes its international liability for any damage caused by space activities committed either in the territory of Indonesia or within the jurisdiction of Indonesia.³⁹ The space operators are liable to compensate for damage caused by space activities. In case of non-governmental entity the Act does not talk about the quantum of liability i.e. whether it is shared or absolute liability. It only says liability and compensations shall be regulated in the Government Regulations.⁴⁰ “In order to encourage the development of space activities operators may be provided with some facilities by the Government in accordance with the prevailing laws and regulation.”⁴¹

It is not clear whether ‘facilities from the Government’ also include concession in liability and insurance aspects.

All operators except Government Institutions are obliged to undertake third party liability insurance.⁴² In carrying out the launching of space vehicle, the

32 Article 42(1).

33 Article 42(2).

34 Article 56.

35 Article 55.

36 Article 93-94.

37 Article 95-100.

38 Article 100.

39 Article 76(1).

40 Article 83.

41 Article 86.

42 Article 84.

operator must fulfill financial guarantee and insurance of space vehicles.⁴³ In the event that the launching is carried out outside of Indonesian territory, the licensee of launching must be in agreement that the Indonesian Government may be waived from liability for any loss.⁴⁴

4.4 Transfer of the Space Assets

Indonesia foresees on orbit sale-purchase of satellites. Transfer of space assets are to be in accordance with the transfer agreement that will determine the safety, security and liability aspects. In the event of transfer of ownership of the space assets, the liability of space operator is effectively transferred since the entry into force of the transfer agreement.⁴⁵

4.5 Implementation of Registration Principle

The Space Agency also has the responsibility to register all space objects in accordance with the Registration Convention and furnish information regarding the same to the UN Secretary General. “Any space objects that is launched from the territorial sovereignty and jurisdiction of Indonesia or launched from territory of other states conducted by Indonesian Governmental Institutions, legal entities or citizens must be registered to Space Agency.”⁴⁶ The register must include the following information: name of launching state; an appropriate designator/ registration number of the space vehicle; date, time, location of launch; basic orbital parameters, including Nodal period, inclination, as well as apogee and perigee of the Space Vehicle; general functions of the Space Vehicle; name of other participating Sates if there is more than one launching state; and any other related and useful information for the purpose of registration.⁴⁷

4.6 Protection of Environment

Any operator conducting space activities are obliged to maintain and preserve environment. They are prohibited to violate the standards of quality and criteria of environment. The act does not specifically talk regarding debris mitigation and environment impact assessment.

4.7 Other Aspects

The 2013 Act has also elaborated on remote sensing and data acquisition, processing, storage and distribution.⁴⁸

The Space Agency is under an obligation to prepare master plans containing vision and mission, policy, strategy and short, medium and long-term

43 Article 35(1)(a).

44 Article 35(2).

45 Article 78(1).

46 Article 71(1).

47 Article 71(2).

48 Part three Article 15-23.

strategic map. The master plan serves as national guideline to manage space activities.⁴⁹

5. Conclusion

The 2013 Act on Space Activities is reflection of Indonesia's space policy as well commitment of Indonesia's international obligations. The law categorizes space activities into five main areas – space science, remote sensing, space technology and Commercialisation of space activities. It stipulates regulations for each of these aspects. Though act came four months before the UNGA resolution on national space legislation was passed but has included all the prescribed parameters of the resolution.

The section on commercialization of space activities is very meager. It stipulates that commercial space activities can only be carried out by legal entities established under Indonesian law. The procedural aspect for such activities has been left to be regulated by the Governmental regulation granting flexibility to the competent authorities.

With regard to financial responsibility of commercial enterprise, it is suggested clarity must be brought on the quantum of their liability. State practice suggests that a share responsibility has been preferred. With regard to environment protection the law would have prescribed much specific measures like environment impact assessment, debris mitigation steps. It seems it has considered environments issues in space with any other terrestrial environmental problems.

Indonesia acknowledges in the explanatory note to the Act, that Outer commences at 100Km and beyond but the Act has defined outer space vaguely as space beyond airspace. It is suggested if a clear definition as stated in the explanatory note is provided within the Act, it will be much more beneficial. Nonetheless one can predict Indonesia has taken a milestone step towards emerging space power.

49 Article 40.