

# An Analysis on the Regional Characteristics of National Space Law-Making: A Case Study Based on the Findings of the National Space Legislation Initiative\*

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## Abstract

This paper intends to explore the characteristics of national space legislation in the Asia-Pacific region, mainly based on the findings of a report compiled by the National Space Legislation Initiative (NSLI) participated by experts and practitioners of space policy and law from nine States in the Asia-Pacific region. The report's findings suggest that the private entities' participation in the space activities is a major driving factor behind the enactment of national space laws. Through a detailed re-investigation of the report together with information obtained from interviews, material research and comparison with cases in other regions, authors found that the States' political, juridical, geographical factors and legal culture are likely to be additional factors, and that these may be applicable to cases in other regions. Learning about the law-making experiences of other States, as NSLI has done, would be beneficial for States interested in establishing their own national space laws.

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## 1. Introduction

This case study intends to explore the characteristics of the legislation of national space laws and regulations in the Asia-Pacific region based on the findings of the National Space Legislation Initiative (NSLI) launched at the 26th session of the Asia-Pacific Regional Space Agency Forum (APRSAF) held in Nagoya, Japan, in 2019.<sup>1</sup> The NSLI aims to cooperatively enhance the States' capacity to implement and develop national space laws in line with the international norms through mutual learning and joint comparative analysis of respective space-related national laws and regulations. The membership of NSLI is open to national governmental organizations of States in the Asia-Pacific, and experts and practitioners of space policy and law from nine States (Australia, India, Indonesia, Japan, Malaysia, the Philippines, the Republic of Korea, Thailand, and Viet Nam [hereinafter "NSLI States"]) participated in its Study Group.<sup>2</sup>

NSLI's main task was to compile through the Study Group a report on the status of national space legislation for submission to the Legal Subcommittee (LSC) of the United Nations Committee on Peaceful Use of Outer Space (UNCOPUOS). This report was jointly submitted to the 60th session of LSC from the nine NSLI States (hereinafter "NSLI Report").<sup>3</sup>

The NSLI Report provides each State's status of space activities, ratification status of international regimes, and the state of national space legislation. To create a common understanding in exchanging information and drafting the report, the Study Group used a questionnaire developed in consideration of the 2013 United Nations General Assembly Resolution 68/74, the answers to which were summarized in the "National Space Legislation Information

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1 For the information on the NSLI, *see generally*, NSLI website, [https://aprsaf.org/initiatives/national\\_space\\_legislation/](https://aprsaf.org/initiatives/national_space_legislation/), (accessed 12.08.21); *see also*, I. Kuriyama, K. Kikuchi, T. Iwai, Y. Kagiwada, A Regional Initiative for Studying the Status of National Space Laws, IAC-20-E7.5.10, 71st International Astronautical Congress (IAC) - The CyberSpace Edition, 12-14 October 2020; I. Kuriyama, APRSAF's Initiatives for Enhancing Space Policy and Law Capacity in the Asia-Pacific Region, technical presentation, 60th Session of COPUOS Legal Subcommittee, June 2021, <http://unoosa.org/documents/pdf/copuos/lsc/2021/tech-05E.pdf>, (accessed 16.09.21). For the information on APRSAF, *see generally*, APRSAF website, <https://aprsaf.org/about/>, (accessed 12.08.21).

2 The member list of the NSLI Study Group as of the submission of the Report is available as the LSC/UNCOPUOS conference room paper; Membership of the Report on the status of the national space legislation of countries of the Asia-Pacific Regional Space Agency Forum National Space Legislation Initiative, A/AC.105/C.2/2021/CRP.7, 2021, 31 May.

3 Report on the status of the national space legislation of countries of the Asia-Pacific Regional Space Agency Forum National Space Legislation Initiative, working paper submitted by Australia, India, Indonesia, Japan, Malaysia, the Philippines, the Republic of Korea, Thailand, and Viet Nam, LSC/UNCOPUOS, A/AC.105/C.2/L.318, 2021, 1 June [hereinafter NSLI Report].

Form” (hereinafter “Information Form”).<sup>4</sup> The NSLI Report contains three findings: 1) all NSLI States are actively engaged in space development, and these activities are expanding more than ever with the active involvement of non-governmental entities such as the private sector, resulting in the rapid development of national legislation in each State; 2) the Outer Space Treaty has been ratified or signed by all NSLI States, therefore it can be regarded as a fundamental norm for the States; and 3) there is a growing need for the NSLI States to establish effective national space legislation to align with the international legal framework and the emergence of new private space activities.<sup>5</sup>

In this paper, the authors have reanalyzed the NSLI Report’s findings to extract the factors that may affect the national space law-making in the Asia-Pacific countries as a subject for future studies. The authors first examined the relationship between the status of space activities and the national space legislation in NSLI States to examine whether the emergence of new space activities and actors is the important factor that triggers the establishment of national space laws. Then authors conducted interviews with relevant experts and literature surveys to investigate additional factors that may explain the States’ practices. In addition, authors conducted a comparative study with cases from other regions to highlight the significance of these factors. To the extent of the authors’ knowledge, studies analyzing the characteristics of national space legislation in the Asia-Pacific region are still limited and this study serves as a contribution.

This paper is structured in five sections. This introductory section is followed by the second section, which presents the reanalysis of the Report’s findings, the relation between the status of national space legislation and that of space activities. The third section describes additional factors identified from interviews and literature surveys, and the fourth section presents case studies from other regions for comparative considerations. The final section offers a conclusion with implications.

## **2. Reanalysis of the NSLI Report**

Based on the NSLI Report’s findings, the authors presume that the emergence of private entities (including non-governmental organizations such as

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4 Recommendations on national legislation relevant to the peaceful exploration and use of outer space, UNGA.RES. 68/74, 2013. The questionnaire asks about each State’s space activity such as rocket launch and satellite operation, their relationship with international regime including major space treaties, and relevant national legislation. Information Form is available at, [https://www.aprsaf.org/initiatives/national\\_space\\_legislation/pdf/UNCOPUOS\\_InformationForm.pdf](https://www.aprsaf.org/initiatives/national_space_legislation/pdf/UNCOPUOS_InformationForm.pdf), (accessed 19.08.21).

5 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, UNGA/RES 2222(XXI), 1966, 610 U.N.T.S. 205, entered into force on 10 October 1967.

universities and research institutes; the same shall apply hereinafter) engaged in space activities may be one of the key factors that led to the establishment of national space legislation.

In general, laws are needed to protect and limit the rights and freedoms of citizens and organizations in law-abiding countries. Especially concerning space activities, Article VI of Outer Space Treaty requires its State Parties to authorize and continuously supervise the activities of non-governmental entities. This could provide NSLI States an incentive to establish national space legislation. At the same time, national space legislation is expected to ensure business predictability by establishing a simple permit/license system for private entities to easily engage in space activities. Meanwhile, it takes much time and effort to develop comprehensive national legislation. Therefore, it is reasonable to assume that enactment of national space legislation is not necessarily essential in States where there are no entities or only government agencies are engaged in space activities.

To examine the above premise in relation to the NSLI States' practices, this section reanalyzes the relationship between the status of enactment of national space legislation and the participation of private entities in space activities in NSLI States based mainly on the NSLI Report and Information Form (information as of March 2021). Among the comprehensive national space legislation described in the NSLI Report, the following laws, that are specific to space activities with provisions for launching launch vehicles and/or operating satellites, were selected for consideration in this study.

- Australia: Space (Launches and Returns) Act 2018.<sup>6</sup>
- Indonesia: Act on Space Activities 2013.<sup>7</sup>
- Japan: Space Activity Act 2016.<sup>8</sup>
- The Republic of Korea: Space Development Promotion Act 2005.<sup>9</sup>

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6 Space (Launches and Returns) Act 2018, Act No.123 of 1998, revised as Act No.92 of 2018, <https://www.legislation.gov.au/Details/C2019C00246>, (accessed 17.09.21) [hereinafter Space Act 2018].

7 Law of the Republic of Indonesia number 21 of 2013 on Space Activities, Act No. 21 of 2013 [Japanese version], *in* Legal and Compliance Division, General Affairs Department, Japan Aerospace Exploration Agency, Space Law Data Book (Fifth Edition), Japan, 2018, pp. 666-685 [hereinafter Act on Space Activities].

8 Act on Launching of Spacecraft, etc. and Control of Spacecraft, Act No.76 of 2016, [https://www8.cao.go.jp/space/english/activity/documents/space\\_activity\\_act.pdf](https://www8.cao.go.jp/space/english/activity/documents/space_activity_act.pdf), (accessed 17.09.21) [hereinafter Space Activity Act].

9 Space Development Promotion Act, Law No.7538 of 2005, as revised Law No.11690 of 2013 [Japanese version], *in* Legal and Compliance Division, General Affairs Department, Japan Aerospace Exploration Agency, Space Law Data Book (Fifth Edition), Japan, 2018, pp. 733-738.

### 2.1. Launch Activities

The national space laws of Australia, Indonesia, Japan and the Republic of Korea have requirements regarding launching launch vehicles to send satellites into orbit from launch sites in their territories.<sup>10</sup> Australia has legal permit/authorization system not only for launches, but also for the return of space objects.<sup>11</sup>

Of these, Japan is the only State where both government agencies (including local government and national space agencies as defined in the NSLI Report; the same shall apply hereinafter) and private entities develop their own launch vehicles to send satellites into orbit and launch them from launch sites in their territories, while in the Republic of Korea, only government agencies conduct these activities.<sup>12</sup> Australia and Indonesia do not yet launch their own launch vehicles, and in Australia, private entities are developing launch vehicles.<sup>13</sup>

### 2.2. Launch Site Establishment and Operation

In Australia and Indonesia, their respective national space laws stipulate the requirements for the establishment and operation of launch sites.<sup>14</sup>

Of the two States, Australia has both government agencies and private entities engaging in launch site establishment and operation, while in Indonesia, only government agencies have done so thus far.

### 2.3. Satellite Operation

In Australia, Indonesia, Japan, and the Republic of Korea, both the government agencies and private entities are operating satellites, while only Japan has a licensing system specifically for the control of spacecraft under

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10 As for Australia, *See, e.g.*, Space Act 2018, *supra* note 6, Div.3 of Part 3. As for Indonesia, *See, e.g.*, Act on Space Activities, *supra* note 7, Art.34-36. In addition, Indonesia is drafting a government regulation on license system for rocket launch activities. Interview with S. Mardinias, R. Heru, C. Damayati, National Institute of Aeronautics and Space (LAPAN), 12 August 2021 (files on authors). As for Japan, *See, e.g.*, Space Activity Act, *supra* note 9, Art.4-12,35-52. As for the Republic of Korea, *See, e.g.*, Space Development Promotion Act, *supra* note 9, Art.11-14.

11 *See, e.g.*, Space Act 2018, *supra* note 6, Div.6 of Part 3.

12 In the NSLI Report, national space agency is defined as “a governmental or other legal entity sponsored by and acting on behalf of a Government that implements a national space programme.” NSLI Report, *supra* note 3, annotation 5.

13 *See, e.g., id.* par. 12, par. 63, par. 70. Indonesia has developed and launched their own sounding rockets. *See, e.g., id.* par. 12.

14 As for Australia, *See, e.g.*, Space Act 2018, *supra* note 6, Div.2 of Part 3. As for Indonesia, *See, e.g.*, Act on Space Activities, *supra* note 8, Art.44-50. Japan’s national space law does not stipulate the requirements for the establishment and operation of launch site, but the use of a launch sites is permitted through the review of application of permission for the launch of spacecraft. *See, e.g.*, Space Activity Act, *supra* note 8, Art. 4(2) (iii),6(ii),16-18.

the national space law.<sup>15</sup> According to the NSLI Report, the requirements for the use of frequencies for satellite operation are based on the conventional radio law and/or telecommunication law in most NSLI States.<sup>16</sup>

#### **2.4. Findings from Reanalysis**

The reanalysis revealed that in most cases, the enactment of national space legislation is consistent with the fact that private entities are engaged in or expected to be engaged in space activities in NSLI States as described in the NSLI Report. Meanwhile, some of the NSLI States have enacted space laws that cover the requirements of specific space activities, even though private entities are not engaged in such activities. Conversely, some States have not necessarily enacted national space laws that cover specific activities in which private entities are engaged. These results suggest that there are factors other than private entities participation that influence the enactment of national space legislation.

### **3. Other Factors to Drive National Space Legislation**

In this section, based on information from the interview with experts and literature survey, the authors identified four additional factors that may facilitate or characterize national space legislation in the NSLI States. It should be noted that the classification of the factors here is only one suggestion and different classifications are possible.

#### **3.1. Political Factor**

The political factors here include visions and intentions, political priorities, policy agendas, and political debates shared among policy makers and stakeholders.

Indonesia has been engaged in space activities since 1966, when it participated in the INTELSAT operation. Due to its geographical advantage of being located just below the equator, from the early stage of its space activities, stakeholders shared a political vision that Indonesia should be independent in the aerospace sector. Although it took a long time to come to fruition, this vision became the driving force behind the enactment of the State's space legislation, and in 2013, the Act on Space Activities was finally enacted, which takes into account the possibility of the emergence of a private launch provider and launch site operator in the future.<sup>17</sup>

In Japan, due to national security concerns triggered by instability in the Korean Peninsula in the late 1990s and the argument that commercial space activities should be promoted rather than R&D, the Basic Space Law of

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<sup>15</sup> See, e.g., Space Activity Act, *supra* note 8, Art.20-30.

<sup>16</sup> See, NSLI Report, *supra* note 3, par. 34, par. 47.

<sup>17</sup> S. Mardinias, R. Heru, C. Damayati, *supra* note 10.

2008 was enacted.<sup>18</sup> Japan has a history where it has pursued the space activities solely for peaceful purposes, interpreting them as non-military rather than non-aggressive. Through this legislation, the interpretation of peaceful purposes was changed to non-aggressive purposes, as the Charter of the United Nations recognizes the right to self-defense.<sup>19</sup> In addition, the Law called for the establishment of comprehensive national space legislation, and accordingly, the Space Activities Act was enacted in 2016. Thus, this shows that political and juridical factors (see, Section 3.2) have facilitated the national space legislation in Japan.

In the Republic of Korea, behind the enactment of Space Development Promotion Act of 2005 was the intension of the then Ministry of Science and Technology to make space activities a priority policy issue and to increase the R&D budget for space activities. To promote space activities, the Ministry thought it necessary to establish a legal framework for space development.<sup>20</sup>

### **3.2. Juridical Factor**

Juridical factor here refers to such cases where the implementation of international and national legal frameworks, such as space-related treaties, bilateral agreements, and national laws and regulations, would serve as requirements for the enactment of a national space law.

Indonesia has participated in bilateral, regional, and multilateral agreements related to the implementation of ratified international agreements, such as those with India in 1997 and 2002, Russia in 2006, and Ukraine in 2008. These agreements have given impetus to the enactment of national space legislation to ensure the implementation of space-related treaties.<sup>21</sup>

In Japan, Space Activity Act comprehensively covers space activities from spacecraft launch to operation because the Basic Space Law of 2008 requires comprehensive legislation to comply with the Outer Space Treaty.<sup>22</sup> It sets out the conditions for permitting both the launch and control of spacecraft, while in all other NSLI States, permission for spacecraft control is provided for in laws related to radio frequency licensing.

Another feature of Japan's Space Activities Act is that it provides a license to control spacecraft on the condition that measures are taken to mitigate and

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18 Space Basic Act, Law No.43 of 2008, revised as Law No.66 of 2015.

19 K. Suzuki, Expansion of Japanese Security Space Utilization and US-Japan Alliance, in: New Challenges to US-Japan Alliance in Global Commons (Cyberspace, Outer Space, Arctic Ocean) (provisional translation), the Japan Institute of International Affairs (JIIA), Japan, 2016, pp.51-53.

20 Reply to the questionnaire by J. Lee, Korean Aerospace Research Institute (KARI), 31 August 2021 (files on authors).

21 S. Mardiniyas, R. Heru, C. Damayati, *supra* note 10.

22 Space Basic Act, *supra* note 18, Art. 35.

prevent generation of orbital debris. The origin of such condition can be seen also in the Basic Space Law, which stipulates environmental considerations as one of the principles of space activities though it is not certain whether the issue of space debris should be addressed under the Article IX of the Outer Space Treaty.<sup>23</sup>

### 3.3. Geographical Factor

Geographical factor refers to cases where the geology or geographical characteristics of the States influences the enactment of national space laws.

Australia is an ideal location for rocket launches and returning spacecraft because of its geographical characteristics – its large terrestrial and maritime areas provide natural buffer zones, which limit safety risks to populated areas. With these characteristics, Australia has a long history of involvement in space activities and was a site of several experimental launches of European rockets. It was also the landing site for Japanese Hayabusa-1 & 2 projects. Such characteristics are reflected in Australia's national space legislation and space activities. Its Space (Launches and Returns) Act (2018) covers launches and returns of high power rockets and spacecraft, while the operation of a spacecraft is permitted through application for the use of radio frequency to control a spacecraft.<sup>24</sup>

### 3.4. Legal Culture

Legal culture, tradition, and law-making trends of each State can affect the content and timing of national space legislation.

As we have seen, Indonesia and the Republic of Korea's national space legislation provide licensing mechanisms for the launch of rockets despite there being no private entities engaged in these activities at present. These legislations also have provisions for future private sector engagement in space activities.<sup>25</sup> It can be argued that these legislations reflect a State's legal culture that establish law with expectation for or for the promotion of future activities.

In the Republic of Korea, bills are created based on the proposals from Ministry or the National Assembly. In the former case, a bill reflects the government's vision and is therefore suitable for addressing future activities, while in the latter case, a bill reflects the demands of private companies and other interest groups and is therefore suitable for addressing current, visible issues rather than future challenges. As described in 3.1., the Space Development Promotion Act was proposed by the Ministry of Science and

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23 *Id.*, at Art. 7, 20; *See, e.g.*, H. Yotsumoto, D. Ishikawa, Japan, in: J. Wheeler (Ed.), *The Space Law Review*, Law Business Research Ltd., London, 2019, pp.50-51.

24 T. Jones, T. Macken, Australia, in: J. Wheeler (Ed.), *The Space Law Review*, Law Business Research Ltd., London, 2019, pp.28-29.

25 *See, e.g.*, Act on Space Activities, *supra* note 7, Art.37; Act of Space Development Promotion Act, *supra* note 9, Art.18.



ICT.<sup>26</sup> This explains why the Act was enacted before the actual engagement of the private sector.

#### **4. Comparative Analysis with Other Regions**

To better understand the characteristics of the national space laws of the NSLI States, this section provides a preliminary survey of the factors that lead to the creation of national space laws in other regions. However, it must be noted that comparisons with the laws of other regions of the world and the above classification based on the NSLI States need to be made with caution. There usually is no single purpose for enacting national space legislation, but reasons that seem to be most prominent or primary are presented in this section.

##### **4.1. Europe**

From 1969 to the end of 1980s, Norway (1969), Sweden (1982), and the UK (1986) enacted their first national space laws concerning authorization and continuing supervision. The main reason for this seems to be the requirements of Article VI of the Outer Space Treaty (OST). Both Norway and Sweden had launch sites on their territories, which were used by various countries. Thus, national laws were necessary for these governments to assume international responsibility for the consequence of their launches. In the case of the UK, although it did not have a launch site, it owned and operated satellites launched from foreign countries, and therefore had not only international responsibility for “national activities in outer space” (Article VI of the OST), but also as a launch country that procured launch services, and this led to the enactment of national space legislation in the UK. In these legislations, the influence of juridical factor can be seen in the sense that they reflect the notion that the States, as the original actor in space activities, should be responsible for national space activities in accordance with space-related treaties.

##### **4.2. United States**

In the case of the US, there may be two main reasons for the enactment of national space legislation. The first is that of national policy considerations. The Land Remote Sensing Commercialization Act (1984) required the clarification of a three-step procedure to fully privatize the operations of remote sensing satellites other than for research and development purposes. The second reason is the existence of a strong demand for the establishment of administrative procedures for the issuance of permits and commercial rocket launch licenses. As it was necessary to obtain permission from more than ten government agencies to launch a rocket, the Commercial Space

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<sup>26</sup> J. Lee., *supra* note 20.

Launch Act (CSLA) was enacted in 1984 to cut red tape and reduce legal cost associated with commercial launches. In 1988, the CSLA was amended to add an element of government support for emerging industries. Since then, CSLA has been amended whenever a new activity may be initiated, such as the re-entry of space objects or commercial human space suborbital transportation.

In the above case, political and juridical factors may have motivated the enactment of national space legislation. There also appears to be a legal culture in which laws are being enacted as a tool to accelerate policy agendas such as privatization and commercialization of space activities.

#### **4.3. CIS**

In the last decade of the 20th century, with changing international political influence, Russia and Ukraine enacted their first national space laws in 1993 and 1996, respectively. These laws were necessary to commercialize their strong space capabilities. Russia has been successful as a commercial launch provider since then. It can be seen that there was a political factor behind the enactment of these laws, which was the end of the Cold War.

#### **4.4. Africa**

South Africa made the Space Affairs Act in 1993, which provides the licensing of “the operation of a launch facility” in Section 11.1 (c) in addition to the launch of a space object. Similar to Australia’s national space legislation, the geographical factor that triggered the emergence of new space activities seems to have led the State to enact its national space law.

#### **4.5. Americas**

Having issued an administrative edict (not a full-fledged law) in 2001, it seems that Brazil was seeking to promote the commercialization of space and induce foreign launch operators, which was the same motivation that led to the establishment of the Alcantara launch site. The emergence of new activities pushed by the State’s political agenda can be considered as an influence of political factors.

#### **4.6. Recent Trends in National Space Legislation**

One of the trends of the national space legislation in the first decade of the 21st century is that, with the exception of France, States without launch sites or their own launch vehicles have enacted national space laws. This may be attributed to two United Nations General Assembly (GA) Resolutions regarding launching States and enhancing the registration practice.<sup>27</sup> These

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<sup>27</sup> Application of the concept of the “launching State,” UNGA/RES 59/115, 2004; Recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects, UNGA/RES 62/101, 2007.

Resolutions raised the awareness on the possible liability for States which own satellite operation business and also the responsibility of spacefaring States to authorize and supervise its national operators.<sup>28</sup>

As for specific space laws, laws regulating the distribution of satellite remote sensing data have been enacted in Canada (2005) and Germany (2007). This trend was motivated by bilateral agreements with the US on data distribution. Since all of the most advanced sensor technology was provided by the US and almost all of the most advanced remote-sensing satellites were equipped with sensitive US technology, it was necessary to prevent the misuse of data through the laws of a particular country.

In both cases, the juridical factor can be seen as motivation for States to enact national space laws.

In the second decade of the 21st century, the UNCOPUOS/LSC discussion on the GA Resolution 68/74 (2013) was found to have a direct impact on the enactment of national space legislation. The rapid increase in the number of UNCOPUOS membership has also contributed to encouraging more States to develop national space laws. Several years of discussion on the necessity of national space laws strongly motivated States to enact their own legislation. The last decade has also been an era of space advancement, with more and more States owning small satellites and becoming spacefaring States. Furthermore, European States have not only been blessed with many opportunities to exchange information on the latest space law and policies, but also enjoy the benefits of having national space laws. Austria (2012), Denmark (2017), Finland (2018), Portugal (2019), and the UAE (2019) have each enacted their space laws, in part inspired by the discussion at UNCOPUOS.

Other reasons can also be seen behind the enactment of space laws in Luxembourg (2017) and the UAE. To embark on space resource development and to attract foreign businesses and investment, national space legislation is essential. Luxembourg has established a comprehensive National Space Activities Act (2020) after enacting a law on space resources business. There is a political element in these laws that seeks to promote space business in a way that is different from that of traditional spacefaring States. It is also important to note the legal culture of these States.

The motivation behind the enactment of a new space law by New Zealand is somewhat similar to South Africa and Australia. The first private space port was established in its territory and launch activities by a US company were almost underway, which promoted New Zealand to enact its own space law. In these legislations, the emergence of new space activities and actors is a key factor that motivates national space legislation.

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<sup>28</sup> See, e.g., Belgium Law (2005), C-2005/11439; The Netherlands Space Activities Act (2007), WJZ 7080976.

## **5. Conclusion**

In the NSLI States, the development of space activities, in particular the increasing participation of the private entities in space activities and the emergence of new space activities, is a major factor for the establishment of national space legislation. In addition, the following four can be argued as factors that could drive or characterize the national space legislation.

- Political Factor
- Juridical Factor
- Geographical Factor
- Legal Culture

The factors above are not necessarily unique to the NSLI States, and seem to apply to other regions as well. The interactions between these factors have also been found. Since there usually are several reasons for States to develop space laws, it is difficult to identify which factor is the main reason for the enactment of national space legislation. The classification of the factors in this paper is a suggestion.

These findings suggest that learning about law-making experiences of other States would be valuable and beneficial to States interested in enacting national space legislation since they may provide good practices. However, caution should be exercised in comparing the laws of several regions of the world and categorizing the influential factors according to the classification used in this study as they are only hypothesis derived from discussions and information exchange among the NSLI States. Going forward, enhanced understanding of the legal framework and space activities through continuous discussions and information exchange within the Asia-Pacific region and with other regions would be necessary.

In this regard, NSLI, which enables information exchange and mutual learning of national space laws and policies in the region, is an important regional opportunity or framework for accelerating the development of space law capacity and the enactment of national space legislation for the stable and sustainable use of outer space with increased transparency.