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# Legislative Update: Malaysian Space Board Act 2022: Its Major Legal Frameworks

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## ABSTRACT

Malaysian Space Board Act 2022 (Act 834) was gazetted on January 25, 2022. It is a new outer space legislation that was passed by the Malaysian Parliament. This Act is designed to regulate Malaysian outer space activities that are carried out nationally or internationally. This paper discusses the major legal frameworks of the Malaysian Space Board Act 2022. They are the establishment of the Malaysian Space Board, modes of authorisation of space activities, registration of space objects, liability and indemnification, prohibition of activities and offences, event of incident and accident, power of enforcement of public officers, and other relevant legal matters. The methodology used is by analysing the provisions stated in the Malaysian Space Board Act 2022, works of authoritative writers, and United Nations space conventions and treaties. The paper concludes that the Act is a good space legislation, however, certain matters need to be given consideration like the obligation of constant monitoring and supervision of space activities, and the liability insurance clause.

**Keywords:** Malaysian Space Board Act; Malaysian space legislation; Legal framework; Malaysian space law

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### 1. Introduction

Conducting exploration and activities in space is one of the major concerns of the global community at present. This is proven when the trend of space activities operation has gradually shifted from scientific exploration to commercial-based activities. It is predicted



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that the space and celestial bodies areas, besides the air space, will become among the busiest areas in the future.

Malaysia is among the countries that have the potential to develop and engage in space activities and exploration. The country began its involvement in 1960 and has sent various satellites into orbit. They include: TiungSAT-1 (26 September 2000); RazakSAT (14 July 2009); and MEASAT-1 (launched: 12 January 1996); MEASAT-2 (launched: 13 November 1996); MEASAT-3 (launched: 11 December 2006); MEASAT-3a (launched: 21 June 2009); MEASAT-3b (launched: 11 September 2014); MEASAT-3d (22 June 2022) (under the Malaysia East Asia Satellite (MEASAT) Project) and many more. The most recognisable activity is the *Angkasawan* Program. In this project, an astronaut named Syeikh Muszaphar Shukor made his way to the International Space Station in 2007. This program has sparked views on the need to form and establish Malaysian space legislation.<sup>1</sup>

Relying on Malaysia's involvement in space activities and exploration, many propositions, and recommendations have been made for the Government to realise its national space law. This is to safeguard and govern the activities of Malaysian citizens nationally and internationally, and the activities conducted by foreigners domestically. Therefore, in 2022, the Malaysian Parliament had successfully passed the space legislation namely, the Malaysian Space Board Act 2022 (Act 834) (hereinafter referred to as 'the Malaysian Space Board Act 2022'). It was officially gazetted on January 25, 2022.

#### 2. An Overview of the Malaysian Space Board Act 2022 (Act 834)

The Malaysian Space Board Act 2022 was formed from the Malaysian Space Board Bill 2020. The Bill had its first reading in the House of Representatives (Dewan Rakyat) on November 3, 2020. Around a year later, on October 28, 2021, the Dewan Rakyat passed the Malaysian Space Board Bill with no amendment. Therefore, on January 19, 2022, the Bill attained its Royal Assent and on January 25, 2022, it was then successfully gazetted by the Malaysian Parliament.

This Act came into operation on August 4, 2022, the date appointed by the Malaysian Minister of Science, Technology, and Innovation.<sup>2</sup> It is done by a notification in the Gazette. The selected provisions that firstly come into operation are Part I (Preliminary); Part II (Malaysian Space Board); Part VII (Other Offences); and IX (Enforcement); Section 64 (Protection Against Suits and Legal Proceedings); and Section 72 (Regulations). For this

<sup>&</sup>lt;sup>1</sup> Che Zuhaida Saari, 'National Space Legislation: Future Perspectives for Malaysian Space Law' (Doctoral thesis, International Institute of Air and Space Law 2014) 299-307 <https://scholarlypublications.universiteitleiden.nl/handle/1887/29353>; Che Zuhaida Saari, 'Pertimbangan Kajian Penggubalan Undang-Undang Angkasa Lepas' *Berita Harian* (Kuala Lumpur, 17 February 2017) <https://www.pressreader.com/malaysia/berita-harian-malaysia/20170217/281917362837267>.

<sup>&</sup>lt;sup>2</sup> Minister means the Minister charged with the responsibility for science and technology. Refer to Malaysian Space Board Act 2022, s 2.

matter, the Minister has legal authority to appoint different dates for the coming into operation of different provisions of the Act.<sup>3</sup>

The main purpose of the formation of the Malaysian Space Board Act 2022 by the Government of Malaysia is to regulate and control the space-related activities for safety reasons. Apart from that, it is to govern the registration of space objects and to provide regulations and laws with respect to certain offences and other related matters.<sup>4</sup>

The Malaysian Space Board Act 2022 is divided into 10 parts. They are, Part 1 (Preliminary); Part II (Malaysian Space Board); Part III (Prohibition); Part IV (Licensing, etc); Part V (Registration of Space Object); Part VI (Liability); Part VII (Other Offences); Part VIII (Incident and Accident); Part IX (Enforcement); and lastly Part X (General).

The Act provides some legal interpretations of several space-related terms.<sup>5</sup> These space-related terms include space, incident, accident, launch facility, damage, Board, licence, Minister, space object, authorised officer, Launch Safety Officer, permanent resident, Space Regulator, investigator, launch certificate, launch permit, weapon of mass destruction and so forth.

In reference to the region, it applies to the space zone. The Act refers to 'space' as 'a void extending from the one hundred kilometres above sea level.'<sup>6</sup> Hence, the Malaysian Space Board Act 2022 governs and applies to activities that are conducted or aimed to be conducted at the area or region starting from and above 100 km above sea level.

#### 3. The Principal Legal Frameworks

There are eight principles of legal frameworks for Malaysian space legislation. They are (1) the formation of the Malaysian Space Board; (2) authorisation matters in regards of licensing, launch permits, launch certificate, and their procedures; (3) registration of space objects; (4) liability and indemnification; (5) prohibition of activities and offences; (6) event of incident and accident; (7) power of enforcement of public officer; and (8) other relevant legal matters. These eight legal frameworks will govern and regulate Malaysian space activities, nationally and internationally.

#### 3.1 Formation of the Malaysian Space Board

The first major legal framework of the Malaysian Space Board Act 2022, is the formation of the Malaysian Space Board (hereinafter referred to as 'the Space Board').<sup>7</sup> The establishment

<sup>&</sup>lt;sup>3</sup> Malaysian Space Board Act 2022, s 1(2).

<sup>&</sup>lt;sup>4</sup> ibid.

<sup>&</sup>lt;sup>5</sup> ibid s 2.

<sup>&</sup>lt;sup>6</sup> ibid s 2.

<sup>&</sup>lt;sup>7</sup> The legal rules related to the establishment of the Malaysian Space Board are prescribed in the Malaysian Space Board Act 2022, ss 5–14.

of the Space Board<sup>8</sup> is significant to the country as it is the principal body which advises the Malaysian Government on matters related to the implementation of the Act.<sup>9</sup>

Apart from the Space Board's advisory role, the major function of the Board is to ensure the efficacy of the implementation of the Act in the country. It also performs and provides for the performance of the obligations resulting from any agreements, conventions, and relevant international treaties and accords. On top of that, the Space Board's responsibilities are to issue guidelines and directives relevant to the Act, as well as cater to all other matters that are related to the functions of the Board.<sup>10</sup>

The Space Board's members are appointed in writing by the Minister who is in charge of responsibilities related to science and technology.<sup>11</sup> Thus, it refers to the Minister of the Ministry of Science, Technology, and Innovation of Malaysia (hereinafter referred to as 'MOSTI'). The Minister may appoint an alternate member to attend the Board's meeting if the member is unable to attend it for any reason.<sup>12</sup> The Space Board consists of 8 members namely:

- (i) Secretary General of MOSTI. He or she will be the Chairman of the Board;<sup>13</sup>
- (ii) Deputy Secretary General of MOSTI. He or she will be the Deputy Chairman of the Board;<sup>14</sup>
- (iii) One representative from the Ministry of Defence Malaysia;<sup>15</sup>
- (iv) One representative from the Ministry of Communications and Digital Malaysia;<sup>16</sup>
- (v) One representative from the Ministry of Home Affairs Malaysia;<sup>17</sup>
- (vi) One representative from the Ministry of Transport Malaysia;<sup>18</sup>
- (vii) One representative from the Ministry of International Trade and Industry Malaysia;<sup>19</sup>
- (viii) One representative from the Malaysian National Security Council.<sup>20</sup>

- <sup>11</sup> ibid s 2.
- <sup>12</sup> ibid s 5(3).
- <sup>13</sup> ibid s 5(2)(a).
- <sup>14</sup> ibid s 5(2)(b).
- <sup>15</sup> ibid s 5(2)(c).
- <sup>16</sup> ibid s 5(2)(d).
- <sup>17</sup> ibid s 5(2)(e).
- <sup>18</sup> ibid s 5(2)(f).
- <sup>19</sup> ibid s 5(2)(g).
- <sup>20</sup> ibid s 5(2)(h).

<sup>&</sup>lt;sup>8</sup> ibid s 5.

<sup>&</sup>lt;sup>9</sup> ibid s 6(1)(a).

<sup>&</sup>lt;sup>10</sup> ibid ss 6(1)(b), (c), (d), and (e).

When the Chairman's office is vacant or the Chairman is unable to perform his functions, the Deputy Chairman will then act as the Chairman.<sup>21</sup> On the advice of the Chairman, the Minister may appoint a 'Space Regulator' from the public officer.<sup>22</sup> The Space Regulator will then be the Executive Secretary to the Space Board. The Executive Secretary will be responsible for the management of the Space Board's affairs, the implementation of the Board's decision and performing any other duties as directed by the Board.<sup>23</sup>

The Space Board is permitted by the law to delegate any of its functions, as it sees fit, to the Space Regulator. Thus, the Space Regulator is bound to observe all conditions and restrictions imposed by the Board. Hence, any functions and tasks shall be performed and exercised in the name and on behalf of the Board.<sup>24</sup>

The Space Board will have its annual meeting at least once a year. The quorums of the Board are five members including the Chairman of the meeting. If the Chairman is absent, the Deputy Chairman is allowed to replace the Chairman. The law allows the Board to decide its own procedure for the meeting.<sup>25</sup> The Board also has the power to invite any other person to attend its meeting and to advise the Board on any relevant issues. However, such a person is not entitled to vote at the meeting.<sup>26</sup>

Apart from the above, the Space Board has been given legal power to form any committee as it considers necessary to assist the Board. The Board may appoint any of its members or any other person to be the Chairman of the committee and assign any person to be a member of the committee. This committee shall meet as often as necessary. The committee can also invite any person to attend its meeting.<sup>27</sup>

#### 3.2 Authorisation: Licensing, Launch Permit, and Launch Certificate

The International space law<sup>28</sup> imposes that all space activities shall require authorisation especially when the activities involve non-governmental entities. Thus, in observing such an obligation, it is crucial for the Government of Malaysia to provide authorisation especially for its private space activities.<sup>29</sup> Hence, the Malaysian Space Board Act 2022 introduces three

<sup>27</sup> ibid ss 11(1), (2), (3), (5) and (7).

 $<sup>^{21}</sup>$  ibid s 7(1) and (2).

<sup>&</sup>lt;sup>22</sup> ibid s 14(1).

<sup>&</sup>lt;sup>23</sup> ibid ss 8(1), (2) and (3).

<sup>&</sup>lt;sup>24</sup> ibid ss 12(1), (2) and (3).

<sup>&</sup>lt;sup>25</sup> ibid ss 9(1), (3), (4) and (7).

<sup>&</sup>lt;sup>26</sup> ibid s 10.

<sup>&</sup>lt;sup>28</sup> Outer Space Treaty 1967, Art VI stipulates: '... The activities of non-governmental entities in outer space ... shall require authorisation ... by the appropriate State Party to the Treaty ...'. See also Liability Convention 1972.

<sup>&</sup>lt;sup>29</sup> Che Zuhaida Saari, 'National Space Legislation' (n 1).

types of authorisation for Malaysian space activities. They are namely, (1) licence; (2) launch permit; and (3) launch certificate.<sup>30</sup>

The first mode of authorisation of Malaysian space activities is the issuance of a licence.<sup>31</sup> It is one of the most eminent authorisation modes practised by many states. The term 'licence' refers to the licence granted under Part IV of the Malaysian Space Board Act 2022.<sup>32</sup>

The application for a space licence in Malaysia can be made by submitting the application to the Malaysian Space Board. This application must be submitted with a payment of a prescribed fee.<sup>33</sup> For this submission, the Board has the right to ask for additional documents or information, if they consider necessary.<sup>34</sup> The licence will then be issued and granted by the Board to the applicant when the Board is satisfied with all the requirements.<sup>35</sup>

Regarding the activities that require the issuance of a licence, the Malaysian Space Board Act 2022 prescribes the requirement of a licence for conducting three types of space activities. They are (1) building or manufacturing any space object; (2) owning or operating any facility for the integration or testing of any space object; or (3) owning or operating any launch facility.<sup>36</sup> For this matter, a 'space object' refers to a spacecraft and a launch vehicle, including the spacecraft and launch vehicle parts.<sup>37</sup> However, a 'launch facility' refers to any launch pad, spaceport, sea platform or other structures or any ship, aircraft or other conveyances, from which a space object may be launched into space, including any equipment or installation at the launch pad, spaceport, sea platform or other structures on the ship, aircraft or other conveyances, which are necessary to launch a space object into space.<sup>38</sup>

In the event of failure to comply with the requirements, such person will be regarded as committing an offence under the Act. The offence has been categorised into two: (1) where the offender is an individual, he is liable to a fine not exceeding 15 million ringgit or imprisonment for a term not exceeding 10 years or both; (2) where the offender is a corporate body, it will be liable to a fine not exceeding 30 million ringgit.<sup>39</sup>

The space licence will be granted by the Malaysian Space Board subject to the conditions as the Board seems fit to impose. The Board may vary or revoke such conditions

<sup>37</sup> ibid s 2.

<sup>&</sup>lt;sup>30</sup> Malaysian Space Board Act 2022, ss 21–23.

<sup>&</sup>lt;sup>31</sup> ibid s 21.

<sup>&</sup>lt;sup>32</sup> ibid s 2.

<sup>&</sup>lt;sup>33</sup> ibid ss 19(1) and (2).

<sup>&</sup>lt;sup>34</sup> ibid ss 20(1) and (2); s 21(1).

<sup>&</sup>lt;sup>35</sup> ibid s 21(2).

<sup>&</sup>lt;sup>36</sup> ibid ss 16(1)(a)–(c).

<sup>&</sup>lt;sup>38</sup> ibid s 2.

<sup>&</sup>lt;sup>39</sup> ibid ss 16(2)(a) and (b).

at any time.<sup>40</sup> The Board may also impose additional conditions, vary, or revoke them, as they deem appropriate.<sup>41</sup> Anyone who contravenes such conditions will be liable to a fine not exceeding 1 million ringgits if the offender is an individual, and a fine not exceeding 3 million ringgits if the offender is a body corporate.<sup>42</sup>

A licence certificate will specify the duration of the licence.<sup>43</sup> It can be renewed from time to time by submitting the renewal application to the Space Board. The Board has the power to approve or refuse the application. When the licence renewal has been approved, the applicant must make a payment of the prescribed fees.<sup>44</sup> The licence can also be surrendered to the Board at any time by the licensee. This must be done with a written notice made by the licensee based on the licence's requirements. Such surrender shall take effect on the date the Board receives the licence.<sup>45</sup> The licence can be suspended or revoked by the Board with a written notice if it fulfils certain conditions such as, the licensee fails to comply with the provisions of the Act, conviction of an offence under the Act, conviction of fraud, corruption, dishonesty, or moral turpitude, and so forth, or in the interest of the public national security, or international relation.<sup>46</sup>

The second mode of authorisation is the issuance of a launch permit.<sup>47</sup> Any launch service provider, or any person who provides services for launching objects into space,<sup>48</sup> who intends to launch the space object from any launch facility in Malaysia must apply for a launch permit.<sup>49</sup>

Those who fail to comply with the requirements, are regarded as committing an offence and shall be liable to a fine not exceeding 30 million ringgit, or imprisonment for a term not exceeding 10 years, or both, for an individual offender. However, for a corporate body offender, they will be liable to a fine not exceeding 60 million ringgit.<sup>50</sup>

A person may apply for a launch permit by submitting the application to the Space Board.<sup>51</sup> Upon receiving the application and payment of the prescribed fee, the Board may consider the application. If the Board is satisfied with all the requirements, the Board may,

 $<sup>^{40}</sup>$  ibid ss 24(1) and (2).

<sup>&</sup>lt;sup>41</sup> ibid ss 25(1)(a) and (b).

<sup>&</sup>lt;sup>42</sup> ibid ss 24(4)(a), and (b), ss 25(2)(a) and (b).

<sup>&</sup>lt;sup>43</sup> ibid s 26.

<sup>&</sup>lt;sup>44</sup> ibid ss 28(1), (2) and (3).

<sup>&</sup>lt;sup>45</sup> ibid ss 29(1) and (2).

<sup>&</sup>lt;sup>46</sup> ibid ss 31(1)(a)-(d).

<sup>&</sup>lt;sup>47</sup> ibid s 22.

<sup>&</sup>lt;sup>48</sup> ibid s 2.

<sup>&</sup>lt;sup>49</sup> ibid s 17(1).

<sup>&</sup>lt;sup>50</sup> ibid ss 17(2)(a) and (b).

<sup>&</sup>lt;sup>51</sup> ibid s 19(1).

by written notice, communicate to the applicant regarding the Board's intention to grant the launch permit.<sup>52</sup>

It should be noted that the Board will only grant the launch permit to the applicant if the Board is satisfied that the requirement for insurance has been fulfilled. In other words, the applicant must ensure that he will be insured in respect of any liability for any damage to a third party which may result from the launch of the space object into space.<sup>53</sup>

The third mode of authorisation is the issuance of a launch certificate.<sup>54</sup> Any Malaysian citizen, permanent resident, or any corporate body in Malaysia who is an owner of the space object and intends to launch the object into space from any launch facility in or outside Malaysia, must apply for the launch certificate.<sup>55</sup>

Failure to comply with the requirements, the person will be regarded as committing an offence and shall be liable to a fine not exceeding 30 million ringgit, or imprisonment not exceeding 10 years or both, for an individual offender. However, for a corporate body offender, they will be liable to a fine not exceeding 60 million ringgit.<sup>56</sup>

To apply for the launch certificate, a person must submit the application to the Space Board.<sup>57</sup> Upon receiving the application and payment of the fee, and any additional document, if necessary, the Board may then consider the application. If the Board is satisfied with all the requirements, the Board may grant the launch certificate.<sup>58</sup>

#### 3.3 Registration Obligation

The Malaysian Space Board Act 2022 imposes a condition of registration of a space object with the Malaysian Space Regulator. The Space Regulator<sup>59</sup> refers to a public officer appointed by the Minister on the advice of the Chairman of the Space Board under section 14 of the Malaysian Space Board Act 2022.<sup>60</sup>

Registration of space objects is a legal requirement for Malaysian citizens, whether they are permanent residents, or a corporate body registered in Malaysia. This requirement is obligatory when the object has been launched into the earth's orbit or beyond, whether it is from a launch facility in or outside Malaysia.<sup>61</sup> Those who contravene the registration

<sup>60</sup> ibid s 2.

<sup>61</sup> ibid s 36(1).

<sup>&</sup>lt;sup>52</sup> ibid ss 22(1) and (2).

<sup>&</sup>lt;sup>53</sup> ibid ss 22(3) and (4).

<sup>&</sup>lt;sup>54</sup> ibid s 23.

<sup>&</sup>lt;sup>55</sup> ibid s 18(1).

<sup>&</sup>lt;sup>56</sup> ibid ss 18(2)(a) and (b).

<sup>&</sup>lt;sup>57</sup> ibid s 19(1).

<sup>&</sup>lt;sup>58</sup> ibid ss 23(1) and (2).

<sup>&</sup>lt;sup>59</sup> The Space Regulator must perform the functions and duties imposed and exercise the power conferred upon him under the Malaysian Space Board Act 2022: s 14.

obligation shall commit an offence and will be convicted under section 36 and liable to a fine not exceeding 25 thousand ringgit for a case involving an individual. However, if it involves a corporate body, the punishment is a fine not exceeding 50 thousand ringgit.<sup>62</sup>

When the process of registration is completed, the Space Regulator must keep and maintain the register of the space object. The Space Regulator may, on his own accord, remove the name and particulars of the objects from the register or even amend it in the register, upon notification given to him.<sup>63</sup> The owner of the registered space object must notify the Space Regulator in the event of one of these situations: (a) the space object has stopped being in operation; (b) the space object is physically destroyed; or (c) there is any change in the particulars relating to the space object for registration purposes.<sup>64</sup>

#### 3.4 Liability and Indemnification

With respect to the matters of liability, the Space Board Act 2022 imposes an absolute liability to a launch service provider for any damage done resulting from the launch of a space object from a launch facility in Malaysia.<sup>65</sup>

The launch service provider refers to those who provide services for the launching of a space object into space.<sup>66</sup> While the launch facility denotes any launch pad, spaceport, sea platform, or other structure, or any ship, aircraft, or other conveyances, from which a space object may be launched into space. This includes any equipment or installation at the launch pad, spaceport, sea platform, or other structures, or on the ship, aircraft, or other conveyances, which are necessary to launch a space object into space.<sup>67</sup>

Apart from the launch service provider's absolute liability, the owner of the space object will also be absolutely liable for any damage resulting from the operation of his space object which has been launched into the earth orbit or beyond.<sup>68</sup> It is also similar in the situation when damage occurs resulting from the launch of a space object from the launch facility outside Malaysia.<sup>69</sup> The owner of the space object, at this point, is referred to either as a Malaysian citizen, permanent resident, or a corporate body incorporated, established or registered in Malaysia.<sup>70</sup>

In regard to indemnification matters, the Malaysian Space Board Act 2022 imposes a legal obligation to the launch service provider, as well as to the owner of the space object, to

<sup>&</sup>lt;sup>62</sup> ibid s 36(2).

<sup>&</sup>lt;sup>63</sup> ibid ss 38(1)–(3).

<sup>&</sup>lt;sup>64</sup> ibid s 37(1).

<sup>&</sup>lt;sup>65</sup> ibid s 39(1).

<sup>&</sup>lt;sup>66</sup> ibid s 2.

<sup>&</sup>lt;sup>67</sup> ibid s 2.

<sup>&</sup>lt;sup>68</sup> ibid s 39(3).

<sup>&</sup>lt;sup>69</sup> ibid s 39(2).

<sup>&</sup>lt;sup>70</sup> ibid ss 39(2) and (3).

indemnify the Malaysian Government. Thus, the launch service provider must indemnify the Government of Malaysia against any claims and proceedings brought against the Government when the damage occurred from the launch of a space object, from a launch facility in Malaysia.<sup>71</sup>

In addition to the above, the owner of a space object must also indemnify the Government against any claims and proceedings brought when the damage occurred resulting from the operation of his space object that has been launched into the earth's orbit or beyond.<sup>72</sup> The same obligation applies to the owner when the damage happened resulting from the launch of his space object from the launch facility outside Malaysia.<sup>73</sup> The owner can either be a Malaysian citizen, permanent resident, or corporate body incorporated established or registered in Malaysia.<sup>74</sup>

It should be noted that such indemnification due and payable at this juncture, is regarded as a civil debt due to the Government.<sup>75</sup>

#### 3.5 Prohibition of Activities and Offences

The Malaysian Space Board Act 2022 prescribes clearly in its clauses that the space area must be used for peaceful purposes only. Therefore, it is prohibited for any person to place, install, launch, or operate in space, any weapon of mass destruction. It is also forbidden to perform any testing of weapons used for mass destruction. The law also disallows anyone from forming a military base in space, as well as installing, fortifying, and carrying out any weapon testing, or conducting any military manoeuvres in such area.<sup>76</sup>

On top of that, the Act bans any person from conducting any activities that can affect the security and safety of other activity that is carried out in space lawfully. Similarly, it is legally prohibited to perform any activities that may cause harmful contamination to space or will result in adverse changes to the earth's environment.<sup>77</sup>

Those who commit such prohibited activities will be regarded as committing an offence under the Malaysian Space Board Act 2022. They will be liable under the Act based on two categories: (a) if the offender is an individual, he will be imposed a fine not exceeding 50 million ringgit, or imprisonment for a term not exceeding 30 years, or both; However, (b) if the offender is a corporate body, it will be liable to a fine not exceeding 100 million ringgit.<sup>78</sup>

<sup>&</sup>lt;sup>71</sup> ibid s 40(1).

<sup>&</sup>lt;sup>72</sup> ibid s 40(3).

<sup>&</sup>lt;sup>73</sup> ibid s 40(2).

<sup>&</sup>lt;sup>74</sup> ibid ss 40(2) and (3).

<sup>&</sup>lt;sup>75</sup> ibid s 40(4).

<sup>&</sup>lt;sup>76</sup> ibid ss 15(1)(a)–(c).

<sup>&</sup>lt;sup>77</sup> ibid ss 15(1)(d) and (e).

<sup>&</sup>lt;sup>78</sup> ibid ss 15(2)(a) and (b).

Apart from the prohibitions, the Act enforces certain actions to be regarded as offences under the Malaysian Space Board Act 2022. These include the discovery of either the space object, personnel, or passenger of spacecraft, and tampering with the space object.

At this point, any person who discovers any object that he has reason to believe it is originated from space or any person whom he has reason to believe to be a personnel or passenger of a spacecraft, shall notify the Space Regulator, or any authorised officer about his discovery.<sup>79</sup> Any individual who contravenes this requirement is regarded as committing an offence and will be liable to a fine not exceeding 5 thousand ringgit. Whereas, for a body corporate, the fine does not exceed 10 thousand ringgit.<sup>80</sup>

In respect to tampering with the space object, it is an offence for any person who discovers the object that he has reason to believe it is a space object, and he either tampers with the object, remove, damage, or destroy it unless it is necessary to do so in order to prevent any immediate danger that may affect the safety of life or property of the public.<sup>81</sup> Those who commit the offence are liable to a fine not exceeding 10 thousand ringgit if the offender is an individual, and a fine not exceeding 20 thousand ringgit if the offender is a corporate body.<sup>82</sup>

#### 3.6 Event of Incident and Accident

The Malaysian Space Board Act 2022 imposes certain legal procedures in dealing with the event of incidents and accidents that may happen in relation to space activities.

'Incident' refers to any occurrence associated with the space object or launch facility that affects or is likely to affect the safety of the space object, or launch facility, or involves circumstances where an accident nearly happened.<sup>83</sup> Whereas, 'accident' refers to any occurrence associated with a space object or launch facility which causes damage, including fall or collapse, collision, or explosion, of a space object or launch facility.<sup>84</sup> For the purpose of the Act, damage may denote loss of life, any injury, impairment of health to any person, or loss of or damage to any property.<sup>85</sup>

The first legal procedure following the occasion of an incident and accident is an immediate notification by the relevant person to the relevant authority. The licensee, launch permit holder, and launch certificate holder must immediately notify the Space Regulator of any incident or accident involving any space object or launch facility that relates either to

<sup>&</sup>lt;sup>79</sup> ibid s 41(1).

<sup>&</sup>lt;sup>80</sup> ibid ss 41(2)(a) and (b).

<sup>&</sup>lt;sup>81</sup> ibid s 42(1).

<sup>&</sup>lt;sup>82</sup> ibid ss 42(2)(a) and (b).

<sup>&</sup>lt;sup>83</sup> ibid s 2.

<sup>&</sup>lt;sup>84</sup> ibid s 2.

<sup>&</sup>lt;sup>85</sup> ibid s 2.

their licenses, launch permits, or launch certificates.<sup>86</sup> Any person who contravenes this order is regarded as committing an offence and will be liable to a fine not exceeding 25 thousand ringgit if the offender is an individual, and not exceeding 50 thousand ringgit if the offender is a corporate body.<sup>87</sup>

Next, it is regarding the safe custody of the space object. Upon receiving the information about the incident or accident, the Space Regulator must take all reasonable actions to maintain the custody of the space object or launch facility, or any other evidence relating to the incident or accident. This task must be upheld until an investigator<sup>88</sup> is appointed to conduct the investigation.<sup>89</sup> The Minister shall appoint several investigators to investigate the incident or accident.<sup>90</sup>

Upon the appointment of the investigator, it shall then be the duty of the investigator to maintain the safe custody of the space object, launch facility, or other evidence relating to the incident or accident.<sup>91</sup> When the investigator determines that the space object, launch facility, or other evidence is no longer necessary for the purpose of investigation, the investigator can release them to the owner or any person authorised by the owner, to take custody of the object, facility, or other evidence.<sup>92</sup>

Any person who tampers or interferes with, removes, damages, or destroys any of these space objects, launch facility, or other evidence in the Space Regulator's or investigator's custody, such person will be regarded as committing an offence. Upon conviction, the offender will be held liable to a fine not exceeding 10 thousand ringgit for an individual, and not exceeding 20 thousand ringgit for a corporate body.<sup>93</sup>

Another procedure is the appointment of investigators. After the Government is informed about the incident or accident, the Minister shall appoint in writing several investigators to investigate the incident or accident. These investigators are regarded as authorised officers who hold all the necessary powers to conduct the investigation. It should be noted that such an investigation must be conducted for the purpose of preventing the incident or accident in the future, and not for the purpose of apportioning the blame or liability.<sup>94</sup>

The last procedure is the suspension of the licence, launch permit, and launch certificate. With respect to the licence, launch permit, and launch certificate granted by the authority, they must be suspended for a period from the date of the accident, until the date whereby

<sup>&</sup>lt;sup>86</sup> ibid s 43(1).

<sup>&</sup>lt;sup>87</sup> ibid ss 43(2)(a) and (b).

<sup>&</sup>lt;sup>88</sup> Investigator means an investigator appointed under Malaysian Space Board Act 2022, s 44. See also s 2.

<sup>&</sup>lt;sup>89</sup> ibid s 44(1).

<sup>&</sup>lt;sup>90</sup> ibid s 44(1).

<sup>&</sup>lt;sup>91</sup> ibid s 45(2).

<sup>&</sup>lt;sup>92</sup> ibid s 45(3).

<sup>&</sup>lt;sup>93</sup> ibid s 45(4).

<sup>&</sup>lt;sup>94</sup> ibid ss 44(1)–(3) and (5).

the Space Board revokes the suspension.<sup>95</sup> The legal impacts of such suspension are: Firstly, the licence, permit, and certificate shall have no effect during the period of suspension; Secondly, the suspension shall not affect the expiry date of the licence, permit, and certificate as specified or granted by the authority; Thirdly, the Space Board can revoke, or vary the conditions of the suspended licence, permit, and certificate.<sup>96</sup>

#### 3.7 Power of Enforcement of Public Officer

The Malaysian Space Board Act 2022 provides authorisation for public officers. The Minister of the Ministry of Science, Technology and Innovation may, in writing, authorise any public officer to exercise the power of enforcement under the Act.<sup>97</sup> The Act specifies the power of investigation to the authorised officer. The officer shall have all the necessary powers to perform the relevant investigation.<sup>98</sup>

In any case of offences commission during the investigation process, such officer may exercise all or any of the special powers in relation to the police investigation in sizeable cases provided by the Criminal Procedure Code [Act 593].<sup>99</sup>

Each authorised officer will be issued an authority card that was signed by the Minister. This card must be produced, on demand, when the authorised officer is carrying out his duty under the Act.<sup>100</sup>

The Malaysian Space Board Act 2022 fixes two kinds of search and seizure. They are, with a warrant and without a warrant. The search and seizure with a warrant can be performed by the authorised officer upon the submission of written information on oath by him to a Magistrate. When the Magistrate considers it necessary to enter the site, premises, or conveyance, and if it is needed by force, the Magistrate may issue a warrant authorising the authorised officer named in the warrant to perform his duty, at any reasonable time by day, or by night, and with, or without assistance.<sup>101</sup>

In contrast, the search and seizure without a warrant can be legally conducted when the authorised officer has reasonable cause to believe that if by delaying the search and seizure to obtain the warrant, it can adversely affect the evidence of the offence commission, such as when the evidence is likely to be tampered with, removed, damaged, or destroyed.<sup>102</sup>

In the event of a seizure is made, the authorised officer must prepare a list of the space object, launch facility, book, accounts, document, computerised data, signboard, card, letter,

<sup>100</sup>ibid s 48(1).

<sup>&</sup>lt;sup>95</sup> ibid s 46(1).

<sup>&</sup>lt;sup>96</sup> ibid ss 46(2)–(4).

<sup>&</sup>lt;sup>97</sup> ibid s 47.

<sup>&</sup>lt;sup>98</sup> ibid s 49(1).

<sup>&</sup>lt;sup>99</sup> ibid s 49(2).

<sup>&</sup>lt;sup>101</sup>ibid s 50(1).

<sup>&</sup>lt;sup>102</sup>ibid s 51.

pamphlet, leaflet, notice, facility, apparatus, vehicle, equipment, device, thing, or matter seized. Such list must be signed by the authorised officer and shall be delivered immediately to the owner, or person in control of the site, premises, or conveyance which has been searching, or to the owner's agent or employee.<sup>103</sup>

With respect to the seized space objects, they are under the Government's custody pending the completion of any proceedings under the Act. The cost of holding the seized space objects in custody shall be regarded as a debt due to the Government and must be recoverable accordingly.<sup>104</sup>

Other legal rules regarding the enforcement power of the public officer are the power to release the seized space object at any time that can take place after referring to the Space Regulator;<sup>105</sup> the power to forfeit the seized space object;<sup>106</sup> the legal status of the property in forfeited space object;<sup>107</sup> power to access to computerised data;<sup>108</sup> power to require the attendance of person acquainted with the disputed case;<sup>109</sup> power to examine persons acquainted with the case;<sup>110</sup> and so forth.

#### 3.8 Other Relevant Legal Rules

Providing protection against suits and any legal proceedings in any court is one of the legal rules imposed by the Malaysian Space Board Act 2022. The Act prescribes that it is not allowed to bring, institute, or maintain any legal action, suit, prosecution, or other proceeding in any court against any member of the Malaysian Space Board, members of a committee, the Space Regulator, the Launch Safety Officer, an authorised officer, and any investigators, in respect of any act ordered or conducted for the purpose of the Act. This rule only applies when the action was done in good faith, and in a reasonable belief that it was necessary for the purpose intended by the Act. This situation also applies to another person in which his action was done or purported to be done by him under the order, direction, or instruction of those prescribed above.<sup>111</sup>

Another relevant rule is regarding the formulation of relevant space regulations. The Act prescribes the Minister may make any necessary regulations in order to expedite the carrying out of the Act, and to ensure the effectiveness of the implementation of its provisions.<sup>112</sup> The regulations that may be constructed are for the purposes of, among others,

<sup>&</sup>lt;sup>103</sup>ibid ss 52(1) and (2). <sup>104</sup>ibid s 53.

<sup>&</sup>lt;sup>105</sup>ibid s 54.

<sup>&</sup>lt;sup>106</sup>ibid s 55.

<sup>&</sup>lt;sup>107</sup>ibid s 56.

<sup>&</sup>lt;sup>108</sup>ibid s 57.

<sup>&</sup>lt;sup>109</sup>ibid s 59.

<sup>&</sup>lt;sup>110</sup>ibid s 60.

<sup>&</sup>lt;sup>111</sup>ibid ss 64(a) and (b).

<sup>&</sup>lt;sup>112</sup>ibid s 72(1).

fixing the manners for the licence application, launch permits, and launch certificate; to fix for the requirements for licence issuance, launch permits, and launch certificate including requirements relating to financial and technical resources; to prescribe for fees payable under the Act; to prescribe for the manner of application for licence renewal; to prescribe for the manner of registration of space object; to fix the manner of the liability for any damage resulting from the launch of a space object that is insured; to set the manner in which the investigation into any accident or incident shall be conducted.<sup>113</sup>

#### 4. Conclusion

After scrutinising the Malaysian Space Board Act 2022 legal frameworks, it is observed that the Act comprises several similar major legal frameworks of other countries' national space laws. These include the Australian Space (Launches and Returns) Act 2018, the United Kingdom Outer Space Act 1986, and the Space Act of the Republic of Indonesia (Act 21/2013). The major frameworks concerned are, for instance, regarding the competent authority dealing with the states' space activities, the authorisation of national and international space activities, the registration obligation of the space object, the liability, and indemnification clauses.

However, it is noted that there are certain legal rules that have not been particularised clearly in the Act. For instance, the legal obligation of constant monitoring and supervision of space activities from the state's relevant authority.<sup>114</sup> This obligation has been mentioned in Article VI of the Outer Space Treaty 1967,<sup>115</sup> by which it is the legal responsibility of the State Party (or the State Government) to continue to supervise and monitor the space activities of their nationals, especially the non-governmental sector's activities. This must be done after the non-governmental entities have obtained authorisation from the state's authority to carry out the space activities.

This clause is important in order to ensure the states' nationals, especially their nongovernmental entities will constantly comply with all provisions and rules of the United Nations space treaties<sup>116</sup> as imposed by the Outer Space Treaty 1967 in its Article III.<sup>117</sup>

<sup>&</sup>lt;sup>113</sup>ibid ss 72(2)(a), (b), (c), (d), (e), (f) and (g).

<sup>&</sup>lt;sup>114</sup>In the Malaysian Space Board Act 2022, it only imposes the enforcement power to a public officer. However, this is regarding the power of investigation in the event of commission of an offence (see Malaysian Space Board Act 2022, ss 47–51). This enforcement power is different with the constant monitoring and supervision power, as the latter is more on monitoring the activities and providing supervision to the space actors, from the technical and legal aspect, when it is necessary. This is needed to ensure the licensee, launch permit holder, and launch certificate holder are always in compliance with Malaysian law, as well the international law.

<sup>&</sup>lt;sup>115</sup>Outer Space Treaty 1967, Art VI stipulates: '... The activities of non-governmental entities in outer space, including the Moon and other celestial bodies, shall require authorisation and continuing supervision by the appropriate State Party to the Treaty'.

<sup>&</sup>lt;sup>116</sup> The five major treaties are the Outer Space Treaty 1967, the Rescue Agreement 1968, the Liability Convention 1972, the Registration Convention 1975, and the Moon Agreement 1979.

Another concerning matter is indemnification and liability insurance clauses. The international space law imposes rules that a state shall be internationally responsible for the activities of its nationals in outer space,<sup>118</sup> as well as internationally liable for any damage or loss caused by a space object launched by the state or whose launch has been procured by the state.<sup>119</sup> Such rules have, in fact, exposed the State's Government to the financial risk of having to compensate for any liability or loss resulting from their national space activities at the international level.<sup>120</sup>

Thus, the Malaysian Space Board Act 2022 prescribes specifically, in its section 40,<sup>121</sup> that the launch service provider and owner of the space object have legal obligations to indemnify the Malaysian Government against any claim or legal proceedings brought against the Government in respect of any loss or damage done while conducting their space activities. This clause is seen as a protection of the Government from any possible liability arising from the space activities performed by the private entities.

However, in respect of liability insurance, the Malaysian Space Board Act 2022 only imposes such requirements in section 22(3), and (4),<sup>122</sup> one of the requirements to grant the launch permit application. The applicant or the launch service provider will only be granted the launch permit after the Space Board has satisfied with the fulfilment of the liability insurance requirement for the launch permit holder.

<sup>&</sup>lt;sup>117</sup>Outer Space Treaty 1967, Art III specifies: 'States Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations ...'.

<sup>&</sup>lt;sup>118</sup>ibid Art VI imposes: '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 ...'. See also Liability Convention 1972.

<sup>&</sup>lt;sup>119</sup>ibid Art VII specifies: 'Each State Party to the Treaty that launches or procures the launching of an object into outer space ..., and each State Party from whose territory or facility an object is launched, is internationally liable for damage to another State Party ...'. See also Liability Convention 1972.

<sup>&</sup>lt;sup>120</sup>Liability Convention 1972, Art II mentions: 'A launching State shall be absolutely liable to pay compensation for damage caused by its space object on the surface of the Earth or to aircraft in flight'. See also Outer Space Treaty 1967, Art VII and Art VI; See Che Zuhaida Saari, 'National Space Legislation' (n 1).

<sup>&</sup>lt;sup>121</sup>Malaysian Space Board Act 2022, s 40(1) stipulates: 'A launch service provider shall indemnify the Government against any claim and proceedings brought against the Government in respect of any damage resulting from the launch of a space object from a launch facility in Malaysia.'; s 40(2) reads: 'Any citizen of Malaysia, permanent resident or body corporate incorporated, established or registered in Malaysia who is an owner of a space object shall indemnify the Government against any claim and proceedings brought against the Government in respect of any damage resulting from the launch of his or its space object from a launch facility outside Malaysia.'; s 40(3) reads: 'Any citizen of Malaysia, permanent resident or body corporate incorporated, established or registered in Malaysia.'; s 40(3) reads: 'Any citizen of Malaysia, permanent resident or body corporate incorporated, established or registered in Malaysia who is an owner of a space object shall indemnify the Government against any claim and proceedings brought against the Government resident or body corporate incorporated, established or registered in Malaysia who is an owner of a space object shall indemnify the Government against any claim and proceedings brought against the Government in respect of any damage resulting from the operation of his or its space object which has been launched into the earth orbit or beyond.'.

<sup>&</sup>lt;sup>122</sup>ibid s 22(3) reads: 'The applicant for a launch permit shall cause to be insured in respect of any liability for any damage to a third party resulting from the launch of the space object to which the launch permit relates to in such manner as may be prescribed.'; s 22(4) reads: 'Where the Board is satisfied that the requirement for insurance under subsection (3) has been fulfilled, the Board may grant a launch permit.'.

In contrast, it is noted that there is no specific liability insurance requirement imposed by the Act to grant the application for space licence and launch certificate by the authority.<sup>123</sup> However, it is observed that the space licence and the launch certificate holders might as well be exposed to the space liability while conducting their activities, nationally or internationally. This can happen based on their capacity either as an owner of the space object or operator of the space facility. Furthermore, section 40 of the Malaysian Space Board Act 2022<sup>124</sup> has imposed the legal obligation to the launch service provider and also the owner of the space object, to indemnify the Government in respect of any loss that happens. This situation is supposed to be supported by the insurance coverage requirement.

Therefore, it is strongly suggested that in granting the space licence, and the launch certificate to the applicant, the requirement of having liability insurance must be imposed as like the requirement of the launch permit holder. With this condition, the Malaysian Government's financial risk in terms of her space liability will be more secure and protected.

It is hoped that having the Malaysian Space Board Act 2022 will lead to the flourishing and boom of Malaysian space activities at the national and international level. In addition, it will attract foreign investors to be involved and participate in Malaysian space activities confidently. With good space legislation, Malaysia can maintain, grow, and expand its space activities and exploration with certainty and security.

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<sup>&</sup>lt;sup>123</sup>ibid ss 21 and 23. Space licence can be applied for those who intend to: (a) build or manufacture any space object; (b) own or operate any facility for the integration or testing of any space object; or (c) own or operate any launch facility (Malaysian Space Board Act 2022, ss 16(1)(a)–(c)). Whereas, the space launch certificate can be applied by either the Malaysian citizen, or permanent resident, or body corporate registered in Malaysia who or which is an owner of a space object and intends to launch the space object from any facility in or outside Malaysia: s 18(1).

<sup>&</sup>lt;sup>124</sup>ibid s 40 states: '(1) A launch service provider shall indemnify the Government against any claims and proceedings brought against the Government in respect of any damage resulting from the launch of a space object from a launch facility in Malaysia; (2) Any citizen of Malaysia, permanent resident, or body corporate incorporated, established or registered in Malaysia who is an owner of a space object shall indemnify the Government against any claims and proceedings brought against the Government in respect of any damage resulting from the launch of his or its space object from a launch facility outside Malaysia; (3) Any citizen of Malaysia, permanent resident, or body corporate incorporated, established or registered in Malaysia, permanent resident, or body corporate incorporated, established or registered in Malaysia, permanent resident, or body corporate incorporated, established or registered in Malaysia who is an owner of a space object shall indemnify the Government against any claims and proceedings brought against the Government in respect of any damage resulting from the launch of his or its space object from a launch facility outside Malaysia; (3) Any citizen of Malaysia, permanent resident, or body corporate incorporated, established or registered in Malaysia who is an owner of a space object shall indemnify the Government against any claims and proceedings brought against the Government in respect of any damage resulting from the operation of his or its space object which has been launched into the earth orbit or beyond.'

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