VOL 8 NO 1 SPECIAL EDITION | NOVEMBER 2018

Malaysian Journal of Syariah and Law مجلة الشريعة والقانون بماليزيا سينا الماليزيا

ISSN: 1985-7454 | E-ISSN: 2590-4396 www.mjsl.usim.edu.my

MALAYSIAN OUTER SPACE LAW: THE WASATIYYAH APPROACH

Che Zuhaida Saari

Faculty of Syariah and Law, Universiti Sains Islam Malaysia, Bandar Baru Nilai, 71800 Nilai, Negeri Sembilan, Malaysia

chezuhaida@usim.edu.my chezuhaida656@gmail.com

ABSTRACT

Wasatiyyah is not a mathematical moderation. It is a form of just evaluation that applies the Islamic conception of justice which asserts putting things in its proper places. Therefore, it should be defined and interpreted according to each circumstance surrounding the issues. With regards to the application of wasatiyyah in other field like outer space law, it requires analysis of the legal rules of outer space activities based on relevant elements of maqasid. This article highlights some legal rules proposed for Malaysia. It analyses each circumstances in determining whether the wasatiyyah approach is essential. The article applies the library research method including analysing the works of authoritative writers, as well as the United Nations international conventions on outer space. The findings demonstrate that the wasatiyyah approach is appropriate and proper to be applied in formulating and drafting Malaysian outer space law. It has been proven as well that it is capable of generating an excellent outcome of Malaysian space legislation.

Keywords: Outer space legislation, Malaysian outer space law, Maqasid Syariah, Wasatiyyah.

Introduction

Outer space law refers to laws that govern outer space activities. The law could be either global or domestic in nature. Since the formation of legislation has always been a matter of domestic jurisdiction, thus, a state government has an absolute power to shape and mould its outer space legislation. As a matter of fact, many countries have yet to introduce the space legislation despite their involvement in various space activities. This is also the case of Malaysia. Ahmad Sabirin (1999; 2001), Martin *et al.* (2001), Norul *et al.* (2007), Mustafa (2011), Azriel (2012), Amar (2015), and Goh (2018) acknowledged that among the space activities involved by Malaysia, to name a few: manufacturing and launching satellites (the latest is CubeSats), sending an astronaut to the international space station, scientific research conducted in outer space, suborbital space plane and commercial space port project. The space application includes remote sensing, meteorology, navigation and telecommunication and broadcasting.

Therefore, in this paper a special reference of discussion is made to Malaysia in respect of constructing outer legal rules for her space legislation. As indicated by Che Zuhaida (2014), and Mustafa and Azmi (2015), there are many evidences and proofs of developments of the space industry in Malaysia which indicates the need for Malaysian outer space legislation.

It is unanimously agreed in the process of developing and drafting a law, one aims to produce the best outcome of legislation. Therefore, this paper discusses whether the *wasatiyyah* approach is necessary to be applied in ensuring such outcome, mainly in respect of Malaysian outer space legislation. In view of this, an analysis of some selected proposed outer space legal rules based on relevant elements of *maqasid* is therefore required.

This paper begins with a summary of the *wasatiyyah* approach as a selected conception. The discussion then focuses on the explanation of some outer space rules. Next, it explores and discusses the issue of whether *wasatiyyah* approach is necessary for the construction of outer space legislation.

Wasatiyah Approach: A Selected Conception

Islam is a religion of *wasatiyyah*. It obliges its believer to practise *wasatiyyah* in all aspects of life (Muhammad Mustaqim, Paimah and Hariza 2012).

"Thus, have We made of you an Ummah justly balanced, that ye might be witnesses over the nations, and the Messenger a witness over yourselves" (*Al-Baqarah*, 2: 143).

The word 'ummatan wasatan' has been translated as, to name a few, ummah justly balanced (Yusuf Ali translation), and a community of the middle way (Asad translation). Two principal ingredients of ummatan wasatan are moderation and justice. Thus, to be acknowledged as ummatan wasatan or a justly balanced ummah, one needs to be moderate and simultaneously applying justice. Hence, the wasatiyyah concept is an approach of moderation together with the conception of justice and fairness as prescribed by the Islamic teaching. It is a concept which demonstrates the Islamic system of syariah as better than the other system. Furthermore, it meets the needs and necessities of human being in achieving the prosperous life in this world and hereafter (Ismail Ibrahim 2012).

It is important to highlight that *wasatiyah* is not a mathematical moderation. However, it is a form of just and fair evaluation that applies the Islamic conception of justice which asserts putting things in its proper or right places. Al-Attas (2001) stresses that the notion of 'proper place' implies the existence of 'relation' obtaining between things which altogether describe a system, and it is such relation or network of relations that determines the recognition of the thing's proper place within the system. Therefore, based on this assertion, it is vital to note *wasatiyah* should be defined and interpreted according to each circumstance surrounding the issues.

To ascertain a rightly *wasatiyyah* approach, one should evaluate each subject matter according to its respective situation. This must be done with a fair and just assessment according to the Islamic principle of justice. Al-Attas (2001) further affirms that the conception of justice is actually referring to putting thing in its proper place or where it truly belongs to according to Islam. In other words, *wasatiyyah* does not simply refer to applying the approach of moderation in a reasonable quantified manner without having any clear indication, guideline or benchmark as underlined by Islam. However, such *wasatiyyah* can indeed be achieved when it has been applied with the Islamic conception of justice. In that case, the outcome of the matter will then be justly balanced.

In this section, the author does not intend to discuss the *wasatiyyah* approach as a whole. Instead, the major purpose of the presentation is to highlight the concept which is related to the subject matter of the paper that is the selected proposed outer space legal rules.

In the context of outer space legal rules, the author will look into each of outer space rules that were selected for the discussion. Such outer space rules are among the rules proposed for the construction of Malaysian outer space legislation. In achieving the excellent outcome of legislation, the author will adopt the *wasatiyyah* approach. Such method is applied via the moderation approach that comprises of just evaluation which relates to the Islamic conception of justice. In other words, an analysis will be performed in respect of those rules in regards to moderation approach whereby the rules of outer space law will be justly evaluated based on each circumstance. Such just evaluation will indeed be accomplished after examining the rules from the perspective of whether they are in conformity with the Islamic conception of justice (i.e. based on the concept of putting things at the proper place – this means whether the rules are drafted or constructed as according to their appropriateness). And, in clarifying whether the rules are in compliance with such conception of justice (or have been constructed 'at their proper place'), exploring such rules based on the elements of *maqasid* is therefore crucial.

Elements of *maqasid* are used to ascertain whether the proposed outer space rules are constructed at their proper place, and this will determine whether they are within the spirit of Islamic justice. This analysis is essential in order to acquire excellent legal rules of outer space activities with a just evaluation or moderation as according to the concept of *wasatiyyah*. From this point of view, the paper will then focus on the relevant foundational goals (*maqasid syariah*) such as: preservation of life (*nafs*), preservation of property or wealth (*mal*), and other relevant elements (if necessary).

The relevant elements of *maqasid* will be utilised in determining whether the *wasatiyyah* approach is necessary for the construction of outer space legislation. In circumstances where the applied approach is capable in producing and generating the excellent outcome of legislation, this approach shall then be utilised in developing outer space rules. In realising this matter, the *maqasid* elements will be used to examine the relevant outer space rules and this should be performed according to the respective circumstances of each rule. This is important due to every rule having different and numerous surrounding circumstances and each circumstance should be evaluated justly. Relying on this, it is alleged the *wasatiyyah* approach is not a mathematical moderation approach; however, it should be a moderation approach by way of just and fair evaluation relying on the justice concept that depends on each particular circumstance.

The Three Selected Outer Space Legal Rules

When a state involves with outer space activities, the state should observe the United Nations space obligations as prescribed in its space conventions. The legal obligations arise when the state performs the activities and particularly when the state becomes a party to the treaties. For a state which plans to conduct, or conducts, or has conducted the space activities, it needs a law or legislation to govern and monitor the activities.

This paper will propose some selected legal rules of outer space conventions which are significant for a state that has no specific outer space legislation like Malaysia to consider in the construction of her outer space legislation. In this section, the author will firstly present and discuss the ideas and content of the proposed laws, as well their relationship with the United Nations outer space conventions. These rules are proposed for the construction of Malaysian space legislation. Then, in the next section, the proposed rules will be examined and discussed with respect to the *wasatiyyah* approach as presented earlier.

Authorization Rule

The first crucial rule proposed is from the perspective of authorization. In conducting any space activities, getting and giving authorization is the most critical matter that should be given priority. In regards of controlling the activities of outer space, authorization is the most proper rule to propose. In other words, no authorization means, no activity allowed.

The international space law requires a state to impose authorization to outer space activities of non-governmental entities (Article VI, Outer Space Treaty 1967). Therefore, any activities of outer space conducted by the private sector especially, shall require authorization from the state government. This is crucial from the viewpoint of the state's international responsibility and liability (Article VI and VII, Outer Space Treaty 1967; Liability Convention 1972), the liability of non-governmental entity (Article VI, Outer Space Treaty 1967; Liability Convention 1972), as well the issue of indemnification. In other words, a state must be responsible internationally for its national activities in outer space.

Not only that, the state can also be liable for damage or loss caused by the object that are launched by the state or whose launched procured by the state (Article VI, Outer Space Treaty 1967; Liability Convention 1972). From this perspective, a state including Malaysia - as a contributor to the activities – must be aware with regards to the effect and risk of such international rules. Therefore, the government should think and consider the indemnification strategy to substantiate such issue, yet this issue is not a matter of discussion in this paper.

Relying on the above, it is imperative to firstly propose a mode of authorization for Malaysia in tackling the above issues. With the authorization rules, the government can control the activities of outer space particularly of the non-governmental sector. In brief, there are four modes proposed for the Malaysian legislation to cater or authorise such activities (Che Zuhaida 2014): (1) licences; (2) overseas launch or return certificate; (3) experimental permit; (4) exemption certificate.

For the licence, Che Zuhaida (2014) proposes two types of licences: (a) space site and facility licence; (b) space launch and re-entry licence. The former is required for operation of site and facility of space activities in Malaysia. The latter is necessitated for operation of launch or re-entry of space object from or to Malaysia. In respect of the overseas launch or return certificate, it is proposed for operation of launch or re-entry object conducted by Malaysian national, firm or body incorporated by or under Malaysian laws outside Malaysia. However, the experimental permit is obligatory for operation of space activities solely connected to research or testing a new design, concept, equipment or other experimental purposes. Lastly, the exemption certificate is proposed for operation involving an acceptance of foreign authorization or where appropriate arrangement has been made between Malaysia and other related states, as indicated in Che Zuhaida (2014).

In granting the above authorization modes, various fundamental conditions are required to be satisfied. Meaning to say, the Malaysian Government needs to ensure the applicants have fulfilled or are going to fulfil certain requirements. Che Zuhaida (2014) further clarifies that they are, among others: the applicant is competent to operate the site, and/or facility, and/or space object; the insurance requirement has been or to be satisfied; obtaining the environmental approval (if any) under Malaysian law; providing an adequate environmental plan; conducting the operation in such a way as to prevent the contamination of outer space or adverse changes to the Earth environment; activities will not jeopardize the public health or safety of person or property; conducting activities in such a way as to avoid interference with others' activities in the peaceful exploration and use of outer space; the space object do not contain any nuclear weapon or weapon of mass destruction of any other kind; activities are consistent with Malaysian international obligations; and the activities will not impair the national security of Malaysia.

In the event the applicant succeeds in proving those conditions, the government then can consider granting the authorization. With such authorization, the state government is afterward able to control and govern the activities accordingly. Such action is in fact crucial as it involves the issue of state government's liability and responsibility.

Monitoring and Supervision Rules

The second legal rule proposed is from the perspective of monitoring and supervision. After applying and receiving authorization, there should be a mode to ensure the space activities are in compliance with the laws. The rules of monitoring and supervision are the most appropriate rule to ensure submission of participants in regards to the Malaysian relevant laws.

Indeed, the international space law imposes also the requirement of continuing supervision to the states - apart from the obligation of authorization - particularly when it involves the private sector (Article VI, Outer Space Treaty 1967). Hence, any outer space activities that will be performed, after they have been authorized by the government, should also be monitored constantly and supervised appropriately to ensure they are in conformity with the laws.

At this juncture, in formulating the rules of monitoring and supervision, there are two kinds of power or authority proposed: (1) powers of Minister; and (2) power of supervision and monitoring committee or body. For the first, power of Minister, a related Minister shall be given power to monitor and continuously supervise the related activities. In view of this, apart from his authority of monitoring and supervising the activities, such power shall also extend to power of giving direction as well as power of revocation, variation, or suspension of the former authorization (Che Zuhaida 2014). This means, in exercising his duty of monitoring and supervision, the Minister also has the authority to give any

direction - as appropriate - to the person who conducts space activities, particularly in the event of such person contravening the authorization requirement and condition. The Minister also has legal capacity to revoke, vary or suspend such authorization. Che Zuhaida (2014) further specifies that this circumstance is allowed especially when it affects public health, national security, or to ensure compliance with Malaysian international obligation.

For the second, supervision and monitoring committee or body, it is established to assist the Minister in exercising the power of monitoring and supervision of outer space activities. Che Zuhaida (2014) firmly stresses that this committee or body shall consist of a group of Malaysian technical and legal experts, assisted if necessary, by foreign experts. The committee shall constantly monitor the activities to ensure the compliance of person involved with the Malaysian rules and laws. Besides that, the committee has authority to supervise such person; furthermore, to confirm the related operation will not endanger any life and property. The committee also has capacity to enter the site and make an inspection of its facility, object, and any related equipment of the space activities, as well as permitted to do anything that is reasonably necessary in performing their duty of monitoring and supervision of the activities.

The aforementioned tasks are significant as the state government can ensure the space activities conducted conform to the rules and laws especially at the international level. Such circumstance is essential because it concerns with respect to the matters of liability and responsibility of the government of a state.

Registration of Space Object

The third legal rule proposed is from the perspective of registration of space activities. This actually relates to the registration of a space object and the establishment of a national registry. Anybody who wishes to start the activities under the Malaysian law, after obtaining authorization from the relevant authority, is required to register the object that he plans to launch into outer space with the relevant authority. This is paramount for the purpose of identifying the owner of the object, especially in the event of it being found outside the territory of the state of registry or had caused destruction during its operation.

The United Nations outer space convention has indeed legally recognized the ownership of a space object that it shall belong to the state of registry, which will thus retain jurisdiction and control over the object (Article VIII, Outer Space Treaty 1967; Registration Convention 1975). This international space law also states when the object is found outside the territory of state of registry, it shall be returned to the state of registry upon its request (Article VIII, Outer Space Treaty 1967; Registration Convention 1975). Not only that, the law also imposes on states a requirement of registering the space object that shall be by means of entry in an appropriate registry, and to further inform the United Nations Secretary-General of such registry (Article II(1), Registration Convention 1975).

Hence, in view of the above, it is proposed for Malaysia to establish her national space registry in dealing with matter of registration of outer space object. As written in the draft of Malaysian Outer Space Act proposed by Che Zuhaida (2014), the object that will be launched into outer space under the jurisdiction of Malaysian law must be registered in the Malaysian national space registry and shall be allocated a registration number for the purpose of identification. Che Zuhaida (2014) further states that there shall be also rules of an entry of information of the space object in the national registry by which it shall consists of particulars of the space objects like: the registration number, location of launch, date and time of launch, general functions of the object, its orbital parameter, manufacturer's name, operator's name, elements on board of the object, name of other launching state (if applicable), and any other information that is necessary.

With respect to the entry of information, there must be a time limit to do so. A rule is proposed for the Malaysian outer space legislation, to confirm that the information must be entered in the registry not

later than 30 days following the launch of the space object (Che Zuhaida 2014). In the event of any modification or changes occurred to the object, the relevant information in the registry must also be updated, in other words the national registry must be well informed of the latest changes.

The rules of registration of space object at the national level are indispensable as it relates to the state's liability, responsibility, and also indemnification issues. Once a state can ensure the space objects are properly registered at her national level, the government will then have the capacity to deal with the responsibility, liability as well the indemnification matters appropriately.

Outer Space Legislation: Is Wasatiyyah Approach Necessary?

This part aims at answering whether wasatiyyah approach is necessary for constructing outer space legislation. At the earlier sections, the paper has presented and discussed three crucial rules that proposed for the Malaysian outer space legislation. Hence, in responding to the question, it is necessitated to discuss those rules based on the elements of maqasid. Thus, the discussion will concentrate on the relevant maqasid syariah including preservation of life (nafs), preservation of property or wealth (mal), and other relevant elements (if necessary). It will analyse whether to obtain a better outcome of outer space legislation, the application of wasatiyyah approach is necessary. It must be noted wasatiyyah approach under this scope is actually referring to a fair or just evaluation that is based on the Islamic conception of justice, and not merely a mathematical moderation; in other words, it indeed relates to the notion of putting thing at its proper place.

Thus, in constructing the outer space legislation, the just evaluation concept that is putting thing at its proper place will be applied in determining the appropriateness of the rules in achieving the best outcome of the Malaysian outer space legislation.

With respect to the rules of authorization, it is indispensable to have a specific mode to authorize the activities. This is in fact a way of safeguarding and controlling the space activities as not to harm or danger the life of public and their property. Since the nature of space activities may expose the public and their property to danger and loss of life and property, thus, it is a just evaluation and indeed necessary to impose rules of law regarding the method of authorization by which it can protect and preserve the life (nafs) and property (mal) of the public at large.

Relying on the *wasatiyyah* approach and element of *maqasid* that is preservation of life (*nafs*) and property (mal), it is right and proper to provide various kinds of modes of authorization in dealing with outer space activities. Meaning to say, this proposal is made on the basis of just and fair evaluation on the reason that the different modes proposed are – as a matter of fact - relying on the possibility of different circumstances of application of authorization may take place or applied to the Malaysian authority. Based on the above justification, it is proposed when the applicant plans to operate a space site and facility only; he is then required to apply for space site and facility licence only. However, for those who plan to launch or re-enter an object, they need to apply for space launch and re-entry licence only. Similarly, for overseas launch or return certificate, it is suggested for Malaysian national, firm or body incorporated under Malaysian laws outside Malaysia for them to operate launch or re-entry object. While for those who intend to operate space activities solely for research purposes, it is proposed to apply the experimental permit.

Indeed, such authorizations should only be granted in the event of the applicant succeed in satisfying certain requirements (as mentioned earlier). The requirements such as the competency of applicant to operate the facility, the certainty of the activities will not harm the public health and property, the activities will be conducted in peaceful manner *etc*, are as a matter of fact will safeguard the life (*nafs*) and property (*mal*) of public at large. This in fact relates to the notion of just and fair evaluation under the *wasatiyyah* approach.

The same circumstance applies to the monitoring and supervision rules. In getting the best outcome of space legislation, the *wasatiyyah* approach has been applied. It is a just and proper evaluation with respect to monitoring and supervision rules to have a duo kind of monitoring and supervision system

(i.e. Minister and a committee or body). Indeed, it is more balanced and just to establish a duo kind of supervision and monitoring system as it can provide check and balance in term of performing their tasks in supervising and monitoring the space activities. Therefore, the Minister in charge - apart from his obligation and task to supervise and monitor the activities – should be assisted by a group of experts in dealing with the activities. These experts shall consist of technical and legal professionals. Hence, such circumstances are in fact proven more effective and efficient in comparison with the situation where the Minister is alone doing his task. Indeed, with regards to *maqasid syariah* that is the protection of life (*nafs*) and property (*mal*) of the public during the operation of outer space activities, it appears to be more successful and sustained.

For the registration rules, it is proposed to establish a Malaysian national registry. It is a right and justified action to have a proper national registry in dealing with the registration of outer space activities. Having a proper registry for outer space activities will in fact reflect a systematic arrangement and preparation of the Government of Malaysia. For the protection of property (*mal*) and also life (*nafs*) of public, it is crucial to ensure any object launched into outer space must be registered properly. Once the registration is completed, the owner of the object can be traced easily and this is indispensable in the event of any loss or harm occurred as a result of launch or re-entry of the space object. As a matter of fact, the proposed rules of requirement of updating the information regarding the object is indeed in correspondence with the notion of Islamic justice as it provides the current or latest information about the object. Such circumstances will definitely assist the victim who suffers loss or harm because of the object to claim damages or compensation, and this has in fact met the *magasid* of *syariah*.

From the aforementioned discussion, it is observed in realising a better outcome of space legislation, an application of *wasatiyyah* approach is indeed necessary. The concept of *wasatiyyah* that is based on just evaluation can actually justify the correctness and appropriateness of the space rules whether they can truly uphold the conception of justice according to Islam with the preservation of the element of *magasid* of *syariah*. Be capable of verifying such circumstances, it will lead to a better result.

Concluding Remarks

It is submitted *wasatiyyah* approach is necessary to be applied in the construction of outer space legislation. The discussion of utilization of *wasatiyyah* approach to the proposed rules of authorization, monitoring and supervision as well as registration of space objects has actually justified the capability of determining the appropriateness of such rules in governing the space activities of a state, as to be in accordance with the notion of Islamic justice. In other words, the applied approach has been proven capable in producing and generating the excellent outcome of space legislation.

Therefore, this paper firmly proposes such approach shall be utilised in developing outer space rules. This indeed, to some great extent, will contribute significantly to the growth of outer space legislation of a state in confirming its best outcome. At this juncture, it should be noted that an excellent outcome of legislation will greatly affect the forthcoming involvement and participation of a state and its nationals in outer space activities, particularly to a state that has yet to establish the legislation such as Malaysia.

REFERENCES:

Treaties and Legislation:

Outer Space Treaty 1967: Treaty on Principles Governing the Activities of States in the Exploration and Use of the Outer Space, Including the Moon and Other Celestial Bodies (1967) (Resolution 2222 (XXI)), adopted on 19 December 1966, opened to signature on 27 January 1967, entered into force on 10 October 1967. (1967) 610 UNTS 205, 18 UST 2410, TIAS 6347; (1967) 6 ILM 386; (1967) 61 AJIL 644.

Liability Convention 1972: Convention on International Liability for Damage Caused by Space Objects (1972) (Resolution 2777 (XXVI)), adopted on 29 November 1971, opened to signature on 29

- March 1972, entered into force on 1 September 1972. 24 UST 2389, 961 UNTS 187, TIAS 7762.
- Registration Convention 1975: Convention on Registration of Objects Launched into Outer Space (1974) (Resolution 3235 (XXIX)), adopted on 12 November 1974, opened to signature on 14 January 1975, entered into force on 15 September 1976. 28 UST 695, 1023 UNTS 15, TIAS 8480.

Books, Articles and Others:

- Ahmad Sabirin Arshad. 1999. "Satellite Technology Potentials in Malaysia." In *International Conference on Information Technology*, Kuala Lumpur. September 8-10. 1999. Vol.1. Paper 4.
- Ahmad Sabirin Arshad. 2001. "TiungSAT-1 Technology Transfer Programme." In *TiungSAT-1, From Inception to Inauguration*. Eds. Mazlan Othman and Ahmad Sabirin Arshad. Kuala Lumpur: Astronautic Technology (M) Sdn Bhd.
- Amar Shah Mohsen. 2015. "Engineers Needed for RazakSat-2 Launching." In *The Sun Daily*. 7 March 2015. http://www.thesundaily.my/news/1347850. Accessed: 1 July 2018.
- Azriel, Merryl. 2012. "Spaceport to be built in Malacca." In *Space Safety Magazine*. 10 May 2012. http://www.spacesafetymagazine.com/2012/05/10/spaceport-malaysia-built-malacca/. Accessed: 1 May 2018.
- Che Zuhaida Saari. 2014. *National Space Legislation: Future Perspectives for Malaysian Space Law*. Leiden: International Institute of Air and Space Law, Leiden University.
- Gamal Eldin Attia. 2010. Towards Realization of the Higher Intents of Islamic Law: Maqãásid al-Sharíî 'ah A Functional Approach (Translated from the Arabic by Nancy Roberts). Petaling Jaya: Islamic Book Trust.
- Goh, Deyana. 2018. "Cubesats from Malaysia, Bhutan & the Philippines on SpaceX's Dragon Launch." In *Spacetech*. 29 June 2018. http://www.spacetechasia.com/cubesats-from-malaysia-bhutan-the-philippines-on-spacexs-dragon-launch/. Accessed: 29 June 2018.
- Ismail Ibrahim. 2012. "Wasatiyyah Dari Perspektif Islam." In *Islam dan Wasatiyyah*. Eds. Muhammad Mustaqim Mohd Zarif, Paimah Atoma and Hariza Mohd Yusof. Nilai: Penerbit USIM.
- Martin Sweeting, Wei Sun and Mazlan Othman. 2001. "TiungSAT-1: Malaysia's Microsatellite Programme." In *TiungSAT-1, From Inception to Inauguration*. Eds. Mazlan Othman and Ahmad Sabirin Arshad. Kuala Lumpur: Astronautic Technology (M) Sdn Bhd.
- Mazlan Othman and Ahmad Sabirin Arshad, eds. 2001. *TiungSAT-1, From Inception to Inauguration*. Kuala Lumpur: Astronautic Technology (M) Sdn Bhd.
- Muhammad Mustaqim Mohd Zarif, Paimah Atoma and Hariza Mohd Yusof, eds. 2012. *Islam dan Wasatiyyah*. Nilai: Penerbit USIM.
- Mustafa Din Subari and Azmi Hassan. 2015. "Creating a Vibrant Space Industry for Malaysia: The Need for a Space Act." In *Malaysian Journal of Remote Sensing and GIS*. Vol.4. No.1.
- Mustafa Din Subari. 2011. "Malaysia Space Related Activities 2011: Country Report." http://www.aprsaf.org/annual_meetings/aprsaf18/pdf/program/day3/11_Malaysia%20Country %20Report.pdf. Accessed: 14 June 2018.
- Norul Ridzuan Zakaria *et al.* 2007. "The Symbiotic Relationship between Astronaut Program and Space Tourism Development A Third World Perspective." 2nd IAASS Conference. Chicago. 14 May 2007. In *Space Future*. http://www.spacefuture.com/archive/the_symbiotic_relationship_between_astronaut_program and space tourism development a third world perspective.shtml. Accessed: 1 May 2018.
- Syed Muhammad Naquib Al-Attas. 2001. *Prolegomena to the Metaphysics of Islam.* Kuala Lumpur: ISTAC.
- "Malaysia Astronaut Set to Launch". 2007. In *BBC News*. 10 October 2007. http://news.bbc.co.uk/2/hi/asia-pacific/7036933.stm. Accessed: 1 May 2018.

ii There are five UN space conventions namely: *Outer Space Treaty 1967:* Treaty on Principles Governing the Activities of States in the Exploration and Use of the Outer Space, Including the Moon and Other Celestial Bodies

48

ⁱ It is global in nature when the law referred, is referring to the international space law (for instance, the United Nations outer space conventions); however, it is domestic in nature when the law referred, is referring to the law of a state.

(1967); Liability Convention 1972: Convention on International Liability for Damage Caused by Space Objects (1972); Registration Convention 1975: Convention on Registration of Objects Launched into Outer Space (1974); Rescue Agreement 1968: Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched Into Outer Space (1968); Moon Agreement 1979: Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (1979).