



Viewpoint

Emerging space nations and the development of international regulatory regimes



Joel A. Dennerley

The Regulatory Institutions Network, The Australian National University, Canberra, Australia

ARTICLE INFO

Article history:

Received 15 January 2016

Accepted 10 February 2016

Available online 20 February 2016

Keywords:

Space law

International standards

International cooperation

International regulations

Developing countries

ABSTRACT

The principle of international cooperation underpins space law and therefore space activities. In certain respects, international cooperation in regards to various spatial activities is and has been fostered effectively. However, in relation to the development of international regulations and standards applicable to outer space, the principle of international cooperation has not been applied as effectively or collaboratively as it might have been. The development of international regulatory regimes and industry standards can run the risk of being dominated by more powerful, industrialized countries that invest resources and time into ensuring that their technology, as well as their regulatory and standards agendas prevail. This phenomenon has the potential to affect the global space industry, where the future development of space law may exhibit a bias in favour of established space nations over emerging space nations. This is because established space nations tend to be, and have greater capacity to be, more active in international standard setting and in the formulation of space regulations. These States often compliment their high levels of economic investment in space with a corresponding political will to promote space endeavours, as well as shape appropriate laws and regulations around their respective space industries. Emerging space nations that are serious about developing their international space presence must adopt a similar strategy if they are to make any meaningful contribution to the future evolution of international space law. If this does not happen, we may witness an international space law regime that favours some States over others, by virtue of the fact that certain States are more active in standards setting. This in turn would diminish the impact of the principle of international cooperation between States in relation to outer space activities. This article examines the principle of international cooperation in space, and how it relates to the development of international regulatory regime and standards. In particular, the article highlights the inequality that can manifest between established space nations and emerging space nations in regards to the how space regulations and standards are formulated and ultimately adopted.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

The principle of international cooperation is widely regarded as a fundamental element of international space law [1]. Indeed, throughout the various sources of space law, the term ‘international cooperation’ is emphasised as the appropriate guiding principle for the development of the law relative to outer space [2]. Whilst there is no universally agreed upon legal definition of the term ‘international cooperation,’ it is referred to extensively in the space law treaties and multi-lateral United Nations (UN) resolutions [3]. In these sources of space law, ‘international cooperation’ in the

‘scientific [and] legal aspects of the exploration and use of outer space’ [4] is considered something that should be facilitated, encouraged, promoted and strengthened between States [5]. Recognizing the importance of international cooperation as a principle of space law, one might ask the question; ‘how do States implement international cooperation?’ One commentator points out that, for space cooperation to be effective, there must be ‘scientific rationale, political will and legal agreements’ [6] between those States involved in the space activity. Considering these three elements as broad areas of cooperation between States, one can look to historical examples of where the principle of international cooperation has been fostered effectively [7].

Arguably though, an important additional feature of international cooperation relevant to the ‘legal aspects of the exploration

E-mail address: joel.dennerley@gmail.com.

and use of outer space' [8], must also be the collaborative and representative creation of regulatory regimes applicable to space reflecting the political will and common consensus of the participating space nations. However, the future evolution of international regulatory regimes for space is an area of international cooperation that has the potential to exhibit asymmetric development. To understand why, it is necessary to recognize that a State's economic investment in its the space sector, its active promotion of space activities and the technological innovations that stem from its space industry cannot exist in a regulatory vacuum. As two commentators note, 'the regulatory universe abhors the uncertainty of a vacuum [9].' Economic and political investments in space if they are to flourish, require a corresponding regulatory regime. Once States have developed a successful domestic model of industry regulation they are by virtue of that model better placed to retain influence over their domestic system as well as influence the evolution of international standards [9]. Consequently, the benefit of having industry standards is that they '[reduce] transaction costs, enhancing demand and [allow] the competitive process to operate at the level of products rather than systems [10].' Industrialized and powerful established space nations have the upper hand when it comes to the setting of international standards, rules and norms applicable to space activities. The asymmetric development of international space industry regulations and standards may stem from the bias that is exhibited in favour of powerful established space nations that are active in the standard setting process and who influence standardization [11]. The international space community must therefore be conscious of this phenomenon, as it seems contrary to one of the central tenet of space law – international cooperation. With limited participation from emerging space nations in the formation of international space regulations and standards, the resulting laws and rules may be regarded by such States as unrepresentative or invalid [12].

This article will examine the principle of international space cooperation, its substance and implementation. Next, the article will turn to an analysis of whether international cooperation exists in the realm of international regulatory regimes as well as standard setting bodies and organisations. Finally, it will focus on emerging space nations and the need for these States to become more active in the process of developing international space regulations and standards. This article will refer to the terms, 'established space nations' and 'emerging space nations.' The former term refers to States and international organisations that have an established contemporary presence in space. This essentially refers to the United States, Russia, China, Japan and the twenty-two member States and several country cooperation agreements of the European Space Agency (ESA). Arguably Argentina, Brazil, India and South Korea might also be termed 'established space nations.' The latter term refers to those States with a less established space presence than the former States listed. These emerging space nations can commonly be found across Latin America, Africa and the Asia–Pacific. Finally, it is important to note that there are many States with no space presence at all. In referring to 'emerging space nations,' this article is not referring to the majority of countries worldwide, but rather to a small band of States that have demonstrated an intention to develop their own space capabilities and industries. In section four of the article, the author will detail who these emerging space nations are, and provide examples of their current space endeavours.

2. The principle of international cooperation

The principle of international cooperation underpins space law and therefore space activities. Indeed, pursuant to Article I of the *Outer Space Treaty*, 'the exploration and use of outer space [...]

shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development [...] [13].' This statement outlines a principle of 'equal opportunity' for all States [14]. Whilst it is unlikely that this statement creates a legal obligation to share the benefits of space exploration and use, it does indicate that space-faring States should empower non-space-faring States to access and utilise outer space [14]. In order to ensure this 'equal opportunity' for all States, necessarily what should follow is the development and implementation of the principle of international cooperation. Therefore, equal opportunity entails international cooperation, but how international cooperation will facilitate this equal opportunity remains largely unspecified. Consequently it is important for emerging space nations to take initiatives of their own accord regarding their own space activities.

This principle of cooperation can be found throughout the sources of international space law, and applies to State as well as private, commercial activities [15]. Expert commentators note that international cooperation is 'the main purpose of the *Outer Space Treaty* [16]', and that the peaceful uses of outer space cannot exist without it [17]. Due to this, cooperation is a legal principle that should be promoted and strengthened, especially in regards to developing countries, or emerging space nations, who are equally entitled to benefit from the exploration and use of outer space.

The principle of international space cooperation, especially as it relates to developing countries, is further established by the *Space Benefits Declaration* (the Declaration) [18]. The Declaration, adopted by the United Nations General Assembly in 1996/1997, was in part a response to the dissatisfaction felt by developing countries as to their perceived lack of international space cooperation [19]. Of note, paragraph three of the Declaration outlines that;

'All States, particularly those with relevant space capabilities and with programmes for the exploration and use of outer space, should contribute to promoting and fostering international cooperation on an equitable and mutually acceptable basis. In this context, particular attention should be given to the benefit for and the interests of developing countries and countries with incipient space programmes stemming from such international cooperation conducted with countries with more advanced space capabilities [20].'

This paragraph, whilst not forcing cooperation, is a testament to the fact that established space nations should include emerging space nations in cooperative space endeavours [21]. The types of space endeavours where States can collaborate are numerous and varied. For instance, pursuant to the Space Millennium Declaration of 1999, the 'development of policy regulations' was cited as a key strategy to 'enhance capacity building' against the backdrop of international cooperation [22].

It would seem that the principle of international cooperation is well established in space law. It is undeniably a principle that is designed to unite established space nations with developing countries and emerging space nations in terms of promoting multi-lateral space activities. Consequently, in accordance with Article I of the *Outer Space Treaty*, and the principle of international cooperation outlined in the space law treaties and resolutions, where possible, cooperation should aim to include emerging space nations and non-space-faring States, as well as established space nations, in the exploration and use of outer space. Arguably, this cooperation regarding the exploration and use of outer space would extend to the cooperative multi-lateral development of laws, rules, regulations and standards applicable to spatial activities. Therefore, international cooperation does include legal and policy development cooperation between States. However, as the next sections will

Download English Version:

<https://daneshyari.com/en/article/1130727>

Download Persian Version:

<https://daneshyari.com/article/1130727>

[Daneshyari.com](https://daneshyari.com)