# The End of the Concept of "Common Heritage of Mankind"?

The Views of State Parties to the Moon Agreement

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### **Abstract**

The U.S. Commercial Space Launch Competitiveness Act of November 2015, in particular its Title IV on "Space Resource Exploration and Utilization", raises an important question to the State parties of the Moon Agreement: How should they react? Do they still maintain that the Moon and its natural resources "are the common heritage of mankind" and that neither the surface nor the subsurface of the Moon, "nor any part thereof or natural resources in place shall become the property of any State, international intergovernmental or non-governmental organization, national organization or non-governmental entity or of any natural person" (Article 11 of the Moon Agreement, paras 1 and 3)? Or do they see value in commercial activities of non-governmental entities to explore and exploit resources on the Moon, asteroids, or other celestial bodies which need to be facilitated by granting property rights? In the past years, the State parties to the Moon Agreement have launched several initiatives to raise awareness of the potential of this international treaty, which will be presented and analysed in the present paper. The importance of the reaction of the State parties to national initiatives is rooted in the functioning of public international law as a dynamic field of law in which State practice and opinio iuris can bring about changes to the legal framework. Customary international law can lead to new norms and alter existing ones. In addition, for the interpretation of a treaty, the subsequent practice in its application by State parties is important, as is stated in Article 31 para 3 (b) of the Vienna Convention on the Law of Treaties. In the present paper, the relationship between the concept of "province of mankind" as enshrined in Article I on the Outer Space Treaty and the "common heritage of mankind" mentioned in Article 11 of the Moon Agreement will also be analysed more closely in view of Article 31 para 3 (c) of the Vienna Convention on the Law of Treaties. This shall contribute to a better understanding of whether the "freedom of use" of outer space can ultimately include the ownership and consumption of resources on celestial bodies.

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### I. Introduction

The Moon Agreement of 19791 is the last of the five UN treaties on the law of outer space and the most controversial one. Its low number of ratifications<sup>2</sup> is sometimes attributed to its "futuristic" nature, sometimes to its allegedly market-adverse contents. The principle of the "common heritage of mankind" enshrined in its Article 11 has soon been regarded as an impediment for innovative investments by States and even more by private entrepreneurs. Who would take the risk and financial burdens of exploring the resources of the Moon or other celestial bodies, if it is impossible to retain potential benefits, if this audacious undertaking turns out to be successful? Similar concerns were raised in the context of the UN Convention on the Law of the Sea (UNCLOS) of 1982<sup>3</sup> which could only enter into force in 1994, after an "Implementation Agreement" had been drafted which put away with a lot of concerns of the industrialised countries in respect of the concept of the "common heritage of mankind" with respect to the deep seabed.4 Why has it not been possible to find a similar comforting solution for the Moon Agreement until today? What are the continuing concerns with regard to the concept of the "common heritage of mankind", in particular when it comes to resources of celestial bodies?

These questions gained high actuality when, in November 2015, the United States issued its "Commercial Space Launch Competitiveness Act" according to which U.S citizens shall be entitled "to possess, own, transport, use and sell asteroid recourses or space resources obtained".

While several publications have attempted to interpret the legal framework of space resource mining from an academic perspective,<sup>7</sup> in the following the

<sup>1</sup> Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, opened for signature on 18 December 1979, entered into force on 11 July 1984, 18 ILM 1434, 1383 UNTS 3.

<sup>2</sup> It has 16 State parties as of 1 January 2016: Australia, Austria, Belgium, Chile, Kazakhstan, Kuwait, Lebanon, Mexico, Morocco, Netherlands, Pakistan, Peru, Philippines, Saudi Arabia, Turkey, and Uruguay. It has four additional signatories: France, Guatemala, India, and Romania, see www.unoosa.org.

<sup>3</sup> UN Convention on the Law of the Sea of 10 December 1982, entered into force on 16 November 1994, UNTS 1833, 1834, 1835 (hereinafter UNCLOS).

<sup>4</sup> In UNCLOS, the respective provision on the "common heritage of mankind" are contained in Part XI regulating the "Area", i.e. the deep seabed.

<sup>5</sup> Commercial Space Launch Competitiveness Act of 25 November 2015, H.R. 2262.

<sup>6</sup> See § 51303: Asteroid resources and space recourse rights: "A United States citizen engaged in commercial recovery of an asteroid or a space resource under this chapter shall be entitled to any asteroid resource or space resources obtained, including to possess, own, transport, use, and sell the asteroid resource or space resource obtained in accordance with applicable law, including the international obligations of the United States."

<sup>7</sup> See, for example, the position paper by the IISL Board of Directors of 20 December 2015, http://www.iislweb.org/html/20151220\_news.html; Antonella Bini, The Moon

focus shall be on the reactions to the U.S. Act of the State parties to the Moon Agreement. Their reactions are particularly important in order to assess the current status of the "common heritage of mankind principle" with regard to resources of celestial bodies under international law.

### II. Treaty Interpretation

According to Article 31 of the Vienna Convention on the Law of Treaties, a treaty "shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose." A "special meaning" shall be given to a term if it is established that the parties so intended. In addition, "any subsequent agreement between the parties" and "any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation" shall be taken into account, together with the context. It is specifically these last provisions that make the reaction of the State parties to the Moon Agreement so important.

Agreement in the 21st century, Acta Astronautica, Volume 67 (3), 2010, Pages 496-501; Lawrence Cooper, Encouraging space exploration through a new application of space property rights, Space Policy, Volume 19, Issue 2, May 2003, Pages 111-118; Pascale Ehrenfreund, Margaret Race, David Labdon, Responsible Space Exploration and Use: Balancing Stakeholder Interests, New Space, Volume 1, No 2, 2013, Pages 60-72; David Gump, Finding a Practical Asteroid Strategy, New Space, Volume 1, No 2, 2013, 101-104; Henry Hertzfeld, Brian Weeden, Christopher Johnson, How Simple Terms Mislead Us: The Pitfalls of Thinking about Outer Space as a Commons, IAC-15 - E7.5.2 x 29369 (paper presented at the International Astronautical Congress 2015); Chris Lewicki, Peter Diamandis, Eric Anderson, Chris Voorhees, Frank Mycroft, Planetary Resources – The Asteroid Mining Company, New Space, Volume 1, No 2, 2013, 105-108; Christopher J. Newman, Seeking tranquillity: Embedding sustainability in lunar exploration policy, Space Policy, Volume 33, Part 1, August 2015, 29-37; Matthew Shaer, The Miner's Guide to the Galaxy, Foreign Policy, May/June 2016, 44-51; Fabio Tronchetti, The Space Resource Exploration and Utilization Act: A move forward or a step back?, Space Policy, Volume 34, November 2015, 6-10; Fabio Tronchetti, Private property rights on asteroid resources: Assessing the legality of the Asteroids Act, Space Policy, Volume 30, Issue 4, November 2014, 193-196; Fabio Tronchetti, The commercial exploitation of the natural resources of the moon and other celestial bodies: what role for the Moon Agreement?, in Corinne Jorgenson (ed), Proceedings of the International Institute of Space Law 2010, American Institute of Aeronautics and Astronautics, 2011, 614-624.

<sup>8</sup> Article 31 para. 1 Vienna Convention on the Law of Treaties of 23 May 1969, entered into force on 27 January 1980, UNTS 1155.

<sup>9</sup> Article 31 para. 4, ibid.

<sup>10</sup> Article 31 para. 3 (a) and (b), ibid; see See Oliver Dörr et al, 'Article 31' in: Oliver Dörr and Kirsten Schmalenbach (eds) The Vienna Convention on the Law of Treaties. A Commentary (Springer 2012), paras 70-88.

The current meaning of the term "common heritage of mankind" is far from clear. While there is no obvious "ordinary meaning", some sort of a "special meaning" seems to be given in Article 11 paragraph 1, which provides that the "common heritage of mankind [...] find its expression in the provisions of this Agreement, in particular in paragraph 5 of this article."

Paragraph 5 declares that "States Parties to this Agreement hereby undertake to establish an international regime, including appropriate procedures, to govern the exploitation of the natural resources of the moon as such exploitation is about to become feasible. This provision shall be implemented in accordance with article 18 of this Agreement."

Two important elements can be identified from this definition: (1) the concept shall be defined under an "international legal regime", and (2) the legal regime shall be established as soon "as such exploitation is about to become feasible". From this follows, first, that the contents of the concept is not yet with the intention to trigger adherence to the Agreement by as many States as possible defined. It has been left open on purpose, mainly.<sup>11</sup> Yet, the second consequence seems to be rather obvious, namely that the legal regime must be "international". Whether this represents a moratorium of any space resource mining is not entirely clear.<sup>12</sup> If it is, then it is only binding upon the State parties to the Moon Agreement. But what does this mean for States not parties it?

State parties could argue that the Moon Agreement is not different, but only more specific than the Outer Space Treaty. The "common heritage of mankind" could thus be understood as a mere *interpretation* of the similar sounding principle of the "province of all mankind", which is already enshrined in Article 1 paragraph 1 of the Outer Space Treaty.<sup>13</sup>

One could refer to the preamble of the Moon Agreement,<sup>14</sup> which "recalls" the Outer Space Treaty and the subsequent three UN treaties on the law of

<sup>11</sup> Helmut Tuerk, '30<sup>th</sup> Anniversary of the "The Negotiation of the 'Moon Agreement'", in Corinne Jorgenson (ed), *Proceedings of the International Institute of Space Law* 2009, American Institute of Aeronautics and Astronautics, 2010, 491-500, 498.

<sup>12</sup> Richard Bilder, 'A Legal Regime for the Mining of Helium-3 on the Moon: U.S. Policy Options', (2009) 33 Fordham International Law Journal, 243, 267.

<sup>13</sup> Article 1 para 1 of the Outer Space Treaty reads: "The exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind." Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies of 27 January 1967, entered into force on 10 October 1967, 610 UNTS 205.

<sup>14</sup> The preamble of a treaty is generally regarded as one of the best evidences of the "object and purpose" of a treaty. See Oliver Dörr et al, 'Article 31' in: Oliver Dörr and Kirsten Schmalenbach (eds) The Vienna Convention on the Law of Treaties. A Commentary (Springer 2012), para 56; see also Reservations to the Convention on the Prevention and Punishment of the Crime of Genocide, ICI Reports 1951, 15-30.

outer space and "takes into account" the "need to define and develop the provisions of these international instruments in relation to the moon and other celestial bodies, having regard to further progress in the exploration and use of outer space".

One of the provisions which one certainly needs "to define and develop" in this context is the term "province of all mankind". Article 4 of the Moon Agreement reiterates that the "exploration and use of the Moon shall be the *province of all mankind* and shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development".<sup>15</sup>

While Article 4 refers to the "exploration and use of the Moon", thus activities by humans in outer space, Article 11 concerns the legal status of "the Moon and its natural resources". It follows that the latter can rather not be regarded as a mere interpretation of the former.

However, is important to note that "the exploration and use" shall be carried out for the benefit and in the interests of all countries under both the Outer Space Treaty and Article 4 of the Moon Agreement. In that sense, there are important similarities between the restriction of activities for mere self-centric purposes and the legal status of the Moon and other celestial bodies.

The difference lies in the way that the interests of all countries are better dealt with, by an international legal regime, or by a general principle that can be interpreted and applied by every State concerned unilaterally.

It may be expected that the State parties to the Moon Agreement prefer the first option. However, in what way this "international legal regime" could be established, remains an open question. Does it require the conclusion of a binding international treaty? Or could such a regime also be established by a non-binding instrument, or by customary international law? Or would even a unilateral declaration suffice, which specifies how the interests of other countries are respected?

The reactions of the State parties to the Moon Agreement to the initiative of the United States to allow its citizens to acquire ownership of the resources of the Moon and other celestial bodies could give some indication how they see the current status of the law with regard to those resources.

### III. The 2016 UNCOPUOS Legal Subcomittee's Session

The first occasion where the State parties to the Moon Agreement had the occasion to raise their voice in an appropriate international forum was the session of the Legal Subcommittee of UNCOPUOS in April 2016. 16 13 of the

<sup>15</sup> Emphasis added.

<sup>16</sup> See Report of the Legal Subcommittee on its fifty-fifth session, held in Vienna from 4 to 15 April 2016, UN Doc. A/AC.105/1113.

16 State parties attended the session.<sup>17</sup> The new U.S. Space Act was discussed under agenda item 4, "General Exchange of Views", under agenda item 6, "Status and Application of the five United Nations treaties on outer space", and under agenda item 16, "Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fifty-sixth session."

### III.1. Agenda Item "General Exchange of Views"

The Belgian delegation, in its statement under agenda item "General Exchange of Views", addressed the legislative and governmental initiatives undertaken by States in the area of exploitation of natural resources of outer space.<sup>18</sup> It pointed out that these initiatives put fundamental questions for the future of space law and the global economy to which the exploitation of space resources could contribute substantially. It summarised its position as follows:

- Outer space natural resources cannot be appropriated through extension of national jurisdictions. Such appropriation, besides its incompatibility with international law, would mean risk of global economic imbalance because of exclusivity claimed by some to the detriment of others. Even if such an imbalance has not been envisaged in the short or medium term, any precedent which will be derived from any national claim over such resources could determine virtually irrevocably an advantageous position or a position of disadvantage of states regarding these resources and their derived products.
- These resources, on the other hand, could be usefully and appropriately used for the benefit of the community of nations, taking into account both the legitimate interests of investors as well as those of less advantaged countries, particularly developing countries.
- The role of outer space powers, and their industry in particular, should be recognised as the key element of the international regime to be established. Accordingly, the model adopted by the Montego Bay Convention on the International Law of the Sea could provide valuable indicators as to the role of all stakeholders, whether State or private, when it comes to implementing this regime.
- Such a regime does not preclude State intervention through national laws. Quite the contrary, States should have a fundamental role in the implementation.

<sup>17</sup> Australia, Austria, Belgium, Chile, Kazakhstan, Mexico, Morocco, The Netherlands, Pakistan, Peru, Philippines, Saudi Arabia, and Turkey. See ibid, para 4. Lebanon and Uruguay were not present. Kuwait is not a member of UNCOPUOS.

<sup>18</sup> Statement of the delegation of Belgium under Agenda Item 4, General Exchange of Views, on 5 April 2016. See recordings of the meeting at http://www.unoosa.org/oosa/audio/v2/meetings.jsp?lng=en. The statement was originally held in French. The text above is a verbal transcript of the simultaneous oral translation.

• While Belgium has a natural and logical preference for an international solution to be elaborated and adopted in the framework of the Moon Agreement of 1979, in application of Article 11 in particular, we do not preclude the idea of an international instrument open to all States establishing an *ad hoc* regime responding to the characteristics mentioned.<sup>19</sup>

The Belgian delegation, by this statement, was very clear and outspoken as regards its doubts about the compatibility of a unilateral action to define the regime of resources of celestial bodies with international law. It did not refer to the "common heritage of mankind", but to a more general notion of "benefit of all countries". It based its concern on the "imbalance" which would be created by the exclusivity which can be exercised by some but not by others. By this statement, Belgium provoked a lot of statements, including by the United States, but also by Luxemburg, which introduced its "Space Resource Initiative" during the same session. Luxemburg, in its statement, tried to reassure the delegations that it would (1) report about all the deliberations in the Subcommittee to the competent governmental entities, and (2) to explore very carefully itself the legal framework for exploitation of natural resources of celestial bodies in accordance with international law.<sup>21</sup>

Pakistan pointed out that universal adherence to the United Nations space treaties was important to ensure the rule of law in outer space and called upon all members of UNCOPUOS to ratify the treaties. The five treaties constitute a firm basis for the regulation of space activities worldwide. With regard to recent technological developments, such as the large number of small satellite constellations, suborbital flights, and mining of natural resources of celestial bodies, efforts must begin to deliberate upon new legally binding instruments with the aim of addressing the legal issues arising as a result of such emerging space activities.<sup>22</sup>

Austria and Turkey did not refer in particular to the Moon Agreement or the issue of space resource mining in their statements. Other State parties to the Moon Agreement did not take the floor under this agenda item.

<sup>19</sup> Ibid.

The delegation had referred to the press release of the Minister of Economy of 2 February 2016 in which this initiative was announced, and to the website, www.spaceresources.lu. See Statement of the delegation of Luxemburg under Agenda Item 4, General Exchange of Views, on 5 April 2016. See recordings of the meeting at http://www.unoosa.org/oosa/audio/v2/meetings.jsp?lng=en.

<sup>21</sup> Ibid

<sup>22</sup> See Statement of the delegation of Pakistan under Agenda Item 4, General Exchange of Views, on 11 April 2016. See recordings of the meeting at http://www.unoosa.org/oosa/audio/v2/meetings.jsp?lng=en.

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It is notable that of the 13 State parties to the Moon Agreement present at the Legal Subcommittee, only very few mentioned the issue of space resource mining in their statement despite its remarkable presence in the public debate at the time. Some of them did it during the discussions of the more dedicated agenda item on the "Status and application of the five United Nations treaties on outer space".

### III.2. Agenda Item "Status and Application of the Five United Nations Treaties on Outer Space"

During the discussion on this agenda item, several member States raised concerns that the national legislation of some countries unilaterally enacted to protect private property rights in resources extracted from the Moon or any other celestial body may amount to either a claim of sovereignty or a national appropriation of those bodies and thus could constitute a violation of the Outer Space Treaty.<sup>23</sup> This did not only relate to the U.S. Act, but also to the Space Resources Initiative presented by Luxemburg.

The United States pointed out, in its statement, that national legislation on licensing and the protection of property rights played a crucial role in regulating the relationship between a State and its non-governmental entities in the exploration and use of outer space, and did not in and of itself constitute a violation of the Outer Space Treaty in the absence of an authorisation granted to an entity to extract or utilise resources from the Moon or any other celestial body. It also emphasised that any application under national legislation from a non-governmental entity for authorisation to engage in a resource extraction activity on the Moon or any other celestial body would necessarily be reviewed in accordance with its international treaty obligations.<sup>24</sup>

Belgium was grateful to the United States and Luxemburg for their understanding regarding the need of other countries to have further explanations. Belgium was aware of the necessity to reassure the industry and investors on the fact that someday there would be the question as to what can be done with the resources in outer space. Belgium did not rule out the possibility of exploitation of such resources.<sup>25</sup> It questioned, however, whether legal certainty could be given by just enacting a national legal

<sup>23</sup> See Report of the Legal Subcommittee on its fifty-fifth session, held in Vienna from 4 to 15 April 2016, UN Doc. A/AC.105/1113, para 74.

See Statement of the delegation of the United States under agenda item 6, Status and application of the five United Nations treaties on outer space, on 5 April 2016. See recordings of the meeting at http://www.unoosa.org/oosa/audio/v2/meetings.jsp?lng=en.

<sup>25</sup> See Statement of the delegation of Belgium under agenda item 6, Status and application of the five United Nations treaties on outer space, on 5 April 2016. See recordings of the meeting at http://www.unoosa.org/oosa/audio/v2/meetings.jsp?lng=en.

framework. In view of the concerns by many countries, this was not sufficient and legal uncertainty remained. In addition, the Belgian delegation questioned whether the mentioning of the principle "first-come-first-served" as used in the context of the ITU mentioned in the background document of the U.S. Act was applicable to outer space resources. Furthermore, the Belgian delegation wondered whether it was possible to separate the prohibition of appropriation of a celestial body from the appropriation of the resources of such a body. This rather appeared to be an interpretation which would dispense a provision of its meaning, which, under the Vienna Convention on the Law of Treaties, must be considered as invalid.<sup>26</sup>

Austria highlighted in its statement<sup>27</sup> that it was still committed to the considerations spelled out in the Joint statement on the benefit of adherence to the Moon Agreement of 2008<sup>28</sup> and that the Moon Agreement provided the basis for the seeking of a multilateral solution for the exploitation of the natural resources of celestial bodies in accordance with the general principles of outer space law.<sup>29</sup>

The delegation of the Netherlands presented the initiative of The Hague Institute for Global Justice which had initiated a working group on space resources governance.<sup>30</sup> It emphasised, however, that this was a non-governmental initiative involving several academic institutions and non-governmental organisations.

The delegation of Mexico<sup>31</sup> pointed out that the work on defining an international regime for space resources had been going on for several years.

<sup>26</sup> Ibid.

<sup>27</sup> See Statement of the delegation of Austria under agenda item 6, Status and application of the five United Nations treaties on outer space, on 5 April 2016. See recordings of the meeting at http://www.unoosa.org/oosa/audio/v2/meetings.jsp?lng=en.

Joint statement on the benefits of adherence to the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies by States parties to the Agreement, UN Doc. A/AC.105/C.2/L.272 of 3 April 2008.

<sup>29</sup> Austria had previously been active in promoting the Moon Agreement, amongst others by the coordination of efforts to formulate principles which could form the basis of an international legal regime on outer space resources, and an informal seminar that it had organised to address the benefits of adherence to the Moon Agreement at the margins of the Legal Subcommittee in 2010. See Report of the Legal Subcommittee on its forty-ninth session, held in Vienna from 22 March to 1 April 2010, UN Doc A/AC.105/942, para 39.

<sup>30</sup> See Statement of the delegation of the Netherlands under Agenda Item 6, Status and application of the five United Nations treaties on outer space, on 5 April 2016. See recordings of the meeting at http://www.unoosa.org/oosa/audio/v2/meetings.jsp?lng=en.

<sup>31</sup> See Statement of the delegation of Mexico under Agenda Item 6, General Exchange of Views, on 5 April 2016. See recordings of the meeting at http://www.unoosa.org/oosa/audio/v2/meetings.jsp?lng=en.

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Some countries, State parties to the Moon Agreement, had been leading the way to find a solution to resolve this pending issue. The delegation noted that it was necessary to find a solution under Article 11, eventually allowing for commercialisation of space property. It pointed out that the Moon Agreement included and allowed commercialisation, unlike the other space treaties. Mexico expressed its regret that the previous initiative had not received a broad enough support and response. It reiterated that space resources are the common heritage of mankind. This concept was also reflected in the Law of the Sea Convention, elaborated almost at the same time. Mexico made clear that it rejected the idea of the first-come-first-serve principle, as it is practiced in the ITU. Mexico explicitly supported the position of Belgium. It also noted with appreciation the process going on in the Netherlands which it was following closely. It concluded by referring to Article II of the Outer Space Treaty which prohibited appropriation of outer space.

The delegation of Chile actively took part in the working group discussions under this agenda item, including in the finalisation of its report, emphasizing that the exploration and use of outer space and celestial bodies must be carried out in the interest and for the benefit of all countries, in particular of developing countries.<sup>32</sup>

## III.3. Agenda Item "Proposals to the Committee on the Peaceful Uses of Outer Space for New Items to Be Considered by the Legal Subcommittee at Its Fifty-Sixth Session"

The Belgian delegation took the initiative of formulating a proposal for a new agenda item on potential legal and economic models for space resources exploitation for consideration at the session of the Legal Subcommittee in 2017.<sup>33</sup> It highlighted that it seemed advisable to address issues related to the exploitation of such resources before such an exploitation becomes an economic reality in order to provide the space community with a clear understanding of the general principles of the legal framework in which their activities shall take place, and to give States the opportunity to engage in a multilateral discussion to ensure a common understanding of their international legal obligations.

The purpose of the inclusion in the agenda could be to provide an openended forum for exchange among member States and observers, taking into

<sup>32</sup> See Statement of the delegation of Chile under Agenda Item 6, Status and application of the five United Nations treaties on outer space, on 14 April 2016. See recordings of the meeting at http://www.unoosa.org/oosa/audio/v2/meetings.jsp?lng=en.

<sup>33</sup> See Statement of the delegation of Belgium under agenda item 16, Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fifty-sixth session, 13 April 2016. See recordings of the meeting at http://www.unoosa.org/oosa/audio/v2/meetings.jsp?lng=en.

account possible differences in their respective participation in the existing space treaties.

After informal deliberations with interested UNCOPUOS members, including the United States, a written final proposal was formulated:

"Belgium and [co-sponsoring States] would like to propose the inclusion in the agenda of a new single-issue item dedicated to the general exchange of views on potential legal and economic models for space [mineral] resources exploitation. The goal of this item is to provide an opportunity for a constructive exchange of views among Member States and observers on the way(s) to establish a coherent, sustainable and equitable mechanism guiding the exploitation of space [mineral] resources in due time and in accordance with applicable international law."<sup>34</sup>

This proposal was supported by a number of delegations, including the State parties of the Moon Agreement Austria, the Netherlands, and Mexico, but also by Iran, Greece and the Russian Federation. The Russian Federation stressed that regulation only on the national level could have serious consequences.<sup>35</sup> Austria highlighted that a new agenda item would provide an opportunity for States to express their views on this very topical issue and would facilitate multilateral discussions.<sup>36</sup>

As a result of the debate, it was decided that a new single issue item for discussion should be included on the agenda of the Subcommittee at its fifty-sixth session, entitled "General exchange of views on potential legal models for activities in exploration, exploitation and utilization of space resources".<sup>37</sup> The Subcommittee agreed that the inclusion of that item would provide an opportunity for a constructive, multilateral exchange of views on such activities, including their economic aspects, among member States and permanent observers of the Committee.<sup>38</sup>

Proposal by [Belgium] for the inclusion on the Agenda of the UNCOPUOS Legal Subcommittee of a new single year item dedicated to the preliminary review of legal and economic models for space [mineral] resources exploitation, undated.

<sup>35</sup> See Statement of the delegation of the Russian Federation under agenda item 16, Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fifty-sixth session, 13 April 2016. See recordings of the meeting at http://www.unoosa.org/oosa/audio/v2/meetings.jsp?lng=en.

<sup>36</sup> See Statement of the delegation of Austria under agenda item 16, Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fifty-sixth session, 13 April 2016. See recordings of the meeting at http://www.unoosa.org/oosa/audio/v2/meetings.jsp?lng=en.

<sup>37</sup> See Report of the Legal Subcommittee on its fifty-fifth session, held in Vienna from 4 to 15 April 2016, UN Doc. A/AC.105/1113, para 250.

<sup>38</sup> Ibid.

### IV. Evaluation

The reactions of the State parties to the Moon Agreement in the Legal Subcommittee in 2016 may be interpreted as an insight into their current attitude with regard to the concept of the "common heritage of mankind" and to the legal framework of space resource mining more generally.

First of all, it is remarkable that only very few of these States actually took the floor to make a statement on this issue, despite its actuality both in public debates and in the discussions within UNCOPUOS.<sup>39</sup> This lack of activity can be interpreted in two ways: (1) despite the ongoing initiatives in the United States and in Luxemburg, the States still do not see the pressing need for a legal regime for the mining of outer space resources. The many years that the actual mining is still away from being realised do not trigger the impression that "such exploitation is about to become feasible" (Article 11 para 5 of the Moon Agreement); (2) some of the State parties might be interested in participating in the endeavours of space mining and do not wish to antagonise prospective partners and to disqualify themselves by being too critical towards such initiatives.

Furthermore, one can observe that the State parties which are requesting a multilateral approach for the legal regime for the exploitation of space resources are largely the same States that had signed the Joint Statement on the benefits of the Moon Agreement of 2008, namely Austria, Belgium, Chile, Mexico, the Netherlands, Pakistan and the Philippines.<sup>40</sup> These States have also confirmed their commitment to the Moon Agreement in previous responses to questionnaires sent out by the chair of the working group on the "States and application of the five United Nations treaties on outer space."<sup>41</sup> While adherence to and implementation of the United Nations treaties on outer space is frequently regarded as paramount for upholding the rule of law in outer space, with respect to the Moon Agreement this view is apparently only shared by less than half of the already low number of State parties.

Nevertheless, it could also be observed that a number of States represented in UNCOPUOS supported the initiative of a new agenda item of the Legal

<sup>39</sup> Already at the UNCOPUOS Scientific and Technical Subcommittee in February 2016, the United States made reference to this new development.

<sup>40</sup> Joint statement on the benefits of adherence to the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies by States parties to the Agreement, UN Doc. A/AC.105/C.2/L.272 of 3 April 2008.

<sup>41</sup> Responses to the set of Questions provided by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space (Austria), Committee on the Peaceful Uses of Outer Space, Legal Subcommittee, fifty-second session, A/AC.105/C.2/2013/CRP.18, 8 April 2013; Responses to the set of Questions provided by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space (Belgium, Germany, and the Netherlands), Committee on the Peaceful Uses of Outer Space, Legal Subcommittee, fifty-first session, A/AC.105/C.2/2012/CRP.11, 22 March 2012.

Subcommittee to exchange views on potential legal models for activities in exploration, exploitation and utilisation of space resources and that it was adopted by consensus. It remains to be seen whether and how much input will be presented by State parties to the Moon Agreement and by other States. While these debates might suffer from the cautious approach by governments with regard to sensitive and emerging legal issues at the international level, non-governmental initiatives might turn out to be more dynamic. One of these initiatives is The Hague Space Resource Governance Working Group.

### V. The Hague Space Resource Governance Working Group

The Hague Space Resources Governance Working Group was presented during the Legal Subcommittee of 2016 by the Dutch delegation, which, however, made clear that this was a non-governmental initiative. The Working Group had been set up following a round table on the Governance of Space Resources, convened by The Hague Institute for Global Justice on 1 December 2014.<sup>42</sup> Its aim is to assess, on a global scale, the need for a regulatory framework for space resource activities and to prepare the basis for such a regulatory framework. It works towards the identification and formulation of building blocks for the governance of space resource activities as a basis for negotiations on an international agreement or non-legally binding instrument.<sup>43</sup>

It is notable that among the consortium partners is also an institution of Australia, which on the governmental level had not been very outspoken in its current position on space resources.<sup>44</sup> Institutions of State parties to the Moon Agreement, including the Dutch Ministry of Foreign Affairs, are also involved as associated organisations.<sup>45</sup> Some State entities of other countries are associated,<sup>46</sup> and also commercial enterprises participate.<sup>47</sup> This shows the apparent interest of a variety of relevant stake holders to develop rules governing the exploitation of space resources and to remove the legal uncertainty. The informal setting of a working group has the potential to

<sup>42</sup> See UN Doc. A/AC.105/C.2/2016/CRP.17.

<sup>43</sup> Information is posted on the website www.iiasl.aero.

<sup>44</sup> The Centre for Resources, Energy and Environmental Law (CREEL), University of Melbourne (Australia).

<sup>45</sup> Ministry of Foreign Affairs, The Hague; Mexican Space Agency (AEM), Mexico City.

<sup>46</sup> Ministry of the Economy, Luxembourg; Indian Space Research Organisation (ISRO); National Space Research & Development Agency (NASRDA), Abuja; Office of the Chief State Law Advisor, Pretoria; UAE Space Agency, Abu Dhabi.

<sup>47</sup> Deep Space Industries (DSI), Moffett Field CA; ispace technologies, Inc., Tokyo; Moon Express, Cape Canaveral FL; Planetary Resources, Washington DC; Shackleton Energy Company, Del Valle TX.

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enable a dynamic exchange of views and a target-oriented working style. In these circumstances it is not too far-fetched to expect that the working group will be able to deliver a set of principles which are acceptable and practicable in the not too distant future. Whether they will later be used as a basis for inter-governmental discussions and negotiations remains to be seen, but the prospects are not too bad.<sup>48</sup>

### VI. Conclusion and Outlook

The reactions of the State parties to the Moon Agreement towards the U.S. Commercial Space Launch Competitiveness Act of November 2015 have been mixed. The majority of them remained silent, but others explicitly voiced the need for an international legal regime or at least a multilateral approach. While the logical and natural preference of the State parties to the Moon Agreement would lie in an intergovernmental agreement in the framework of Article 11, *ad hoc* solutions are also not excluded. The core of the principle of the "common heritage of mankind" currently seems to be that the legal regime governing outer space resources must be international and not national. While the initiatives for space mining have started at national levels, multilateral approaches appear appropriate and acceptable also to the relevant governments and even to private companies active in the preparation of space resource mining.

The current dynamic in industry and political debate, both in the United States and in Europe, seems to provide greater chances of the establishment of an international regime on outer space resources than some years ago. Such regime might not immediately take the form of an inter-governmental agreement, because the reluctance of States towards new international treaties in the area of outer space will likely not spare the regime of outer space resources. Nevertheless, as soon as the contents of such a regime can be envisaged, its form might not be so important. Non-binding instruments have proven to be quite effective and broadly accepted, in particular if they have been elaborated by the stake holders concerned. And they certainly do not preclude the conclusion of a binding agreement later. The high interest in the initiative of The Hague Space Resources Governance Working Group, shown by several institutions and private enterprises, is notable. This may be the beginning of a new form of rulemaking in international space law.

<sup>48</sup> An example are the IADC Space Debris Mitigation Guidelines which have first been elaborated by the Inter-Agency Debris Coordination Committee and later, only slightly changed, been adopted by the UNCOPUOS Scientific and Technical Subcommittee.