

# Nandasiri Jasentuliyana Keynote Lecture: Trajectory Towards a Common Understanding – A Multi-Continental Next-Generational Perspective on the Rule of Law in Outer Space

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## Abstract

The IISL's 15th Nandasiri Jasentuliyana Keynote Lecture on Space Law (2023) highlights a key mission of the IISL: the expansion of the 'rule of law' in the exploration and use of outer space for peaceful purposes. The keynote lecture explores the role that the rule of law plays under national and international space law, with the five authors of the keynote lecture each representing a region of the IISL Manfred Lachs Space Law Moot Court Competition: Africa, Asia Pacific, Europe, Latin America, and North America. We highlight regional understandings and historical developments of the rule of law in outer space, and explore the manner in which rule of law leads to the development of space law. We advocate a 'functional' understanding of rule of law that bridges the traditional divide between legally and non-legally binding instruments of space law.

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## 1. Introduction

This lecture is novel in three ways: it is multi-continental, next-generational, and collaboratively produced. For the first time since the inception of the Nandasiri Jasentuliyana Keynote Lecture, the speakers represent the five regions that are currently taking part in the Manfred Lachs Space Law Moot Court Competition of the International Institute of Space Law (IISL): Africa (Joan Chesoni), Asia-Pacific (Bryan Lim), Europe (Scarlet O'Donnell), Latin America (Márcia Alvarenga), and North America (Viva Dadwal). We also represent the 'next generation' of space lawyers from around the world under the age of 45. This lecture, just as space activities often are, is a collaborative effort. Together, we attempt to provide a fresh view on the developments of space activities and international space law, while paying respect to more established works and scholars in the field.

Founded in 1960, the IISL sets out two key missions of the Institute: (a) the "expansion of the rule of law in the exploration and use of outer space for peaceful purposes", and (b) the "the promotion of further development of space law".<sup>1</sup>

The topic of our lecture was chosen to advance these longstanding missions of the IISL. While past Nandasiri Jasentuliyana lectures bear a strong focus on the second mission, i.e., the development of space law; for this year, we have chosen to dedicate our lecture to the prior, i.e., the significance and expansion of the rule of law in outer space. We believe both missions are intertwined like a double helix: the rule of law assists in the development of law, and the development of law in turn fosters the rule of law.

Our assessment starts with an overview of rule of law as a general legal principle, considered both from a general point of view, as well as from the perspective of space law (Part 2). We next explore how the rule of law applies to two contemporary space issues: space resources and space sustainability/debris mitigation (Part 3). The ensuing analysis formulates an understanding of how, even without the promulgation of new space treaties, rule of law still functionally plays a significant role in today's space activities. We coin this as 'functional rule of law' (Part 4). Finally, we conclude and provide an outlook on the importance of rule of law for future developments of space activities (Part 5).

## 2. Rule of Law as a Legal Principle

On Earth, rule of law is fundamental to international peace and security and political stability; to achieve economic and social progress and development; and to protect peoples' rights and fundamental freedoms. We posit that in

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1 [www.iisl.space](http://www.iisl.space).

outer space, it is a necessary ingredient to ensure that space activities are conducted in a peaceful, safe, and responsible manner.<sup>2</sup>

Indeed, the appreciation and promotion of rule of law for activities in outer space was part and parcel of the discussions at the onset of the space age. Professor John Cooper opened his 1961 article on rule of law with the call that the latter be extended to outer space, “[o]therwise the world faces chaos and disaster” and “[p]eace may be at stake”.<sup>3</sup> As we explain below, Professor Cooper voiced this ambition before the adoption of any of the international principles and treaties on outer space. His words echo more than 60 years later, in a world that seems to constantly face ‘chaos and disaster’.

### 2.1. Definition of Rule of Law

We have found that rule of law is frequently referred to in international legal literature, but less commonly explained in reference to contemporary issues and problems. Several perspectives are of interest for an assessment of what rule of law comprises, such as national or regional constitutional instruments, case law, as well as political and legal theory.

Concepts of rule of law are widely spread across the globe and within different legal traditions, from ‘*Siyadat al-qanun*’ (sovereignty of law) in the Arabic speaking part of the world, to the traditions that stem from legalism in Chinese political theory.<sup>4</sup> In Europe, and still relevant today in the Anglo-American tradition, the Magna Carta of 1215 constitutes the first evidence of all subjects being reigned by, and subject to, law rather than rule by the King. Continental European jurists focussed less on the judicial process, and more on the nature of the State, reflected in the terminology commonly used, including ‘*Rechtsstaat*’, ‘*état de droit*’, ‘*stato di diritto*’, or ‘*estado de derecho*’. The concept of rule of law in parts of the world that experienced colonialism such as Africa and Latin America was strongly influenced by their colonial legacies, and has often been used as a means to advance liberal democracies and promote human rights while remaining infused with Eurocentric cultural and linguistic tropes. In this way, it has been observed that the content of rule of law “varies from country to country”<sup>5</sup> and it means “many different things to many different people”.<sup>6</sup>

References to rule of law in domestic constitutional instruments speak to its significance as a legal principle, as well as its ability to inform States’ *opinio juris* and practice. There are two main strains of rule of law: *formal* (or procedural) and *substantive* (or content-based). A rule of law that emphasises

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2 ‘Responsible’ here is used colloquially; not referring to ‘international responsibility’ of States/international organisations.

3 Cooper, ‘The Rule of Law in Outer Space’ (1961).

4 礼 “li”, ‘rites’/‘rituals’ and 法 “fa”, ‘law’.

5 Justice Khanna, India, ‘Rule of Law’ (1977).

6 Arndt, ‘The Origins of Dicey’s Concept of Rule of Law’ (1957).

form and procedure, rather than demanding any particular set of substantive rights or norms, is referred to as ‘formal’, ‘minimalist’, or ‘thin’ rule of law; conversely, a rule of law that includes substantive rights or norms, such as references to democracy and core human rights, is referred to as ‘substantive’, ‘maximalist’, or ‘thick’ rule of law.

## 2.2. Rule of Law in International Space Law

The meaning of rule of law on the international plane (unsurprisingly) has been shaped by States rather than individuals. The ‘classic’ understanding of international rule of law relates to State-compliance with international law, or what is referenced as “rule-based international order”.<sup>7</sup> This variation of rule of law challenges whether international law is ‘real’ law in the absence of legislative power and enforcement.<sup>8</sup> Law requires “certainty of application and clarity of subject matter”.<sup>9</sup> The second way in which to conceive international rule of law is through an ‘internationalised’ or ‘globalised’ understanding, embracing the interactions between national and international legal systems, especially through ‘development cooperation’ and international financial institutions (as described above in the case of Latin America and Africa).

Those who advocate a classic understanding of rule of law debate the compatibility of non-legally binding instruments (NLBIs) and rule of law. Declarations, guidelines, or codes of conduct do not “in and of themselves have the legal ‘force’ of binding treaties”<sup>10</sup> and thus arguably offer less certainty and clarity than treaties. Satisfying the requirements of ‘formal’ rule of law does not automatically lead to compliance. The current international space treaties provide that launching States are internationally liable for damage caused by their space objects, and that States are internationally responsible for their national activities in outer space. However, these provisions have neither been widely tested, nor enforced (even despite incidents like the 2009 Iridium-Cosmos collision) and in any case no new space treaties have been signed for the last 45 years.

Rule of law in outer space has oscillated for decades between its formal and substantive notions, and the classical and globalised definitions. Since the 1960s, NLBIs have served as steppingstones for the development of binding instruments. Professor Cooper’s call to action in 1961 and the consecutive General Assembly resolutions formed the basis for the 1967 Outer Space Treaty (OST), with some provisions carrying over verbatim. Since that period

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7 Beinlich, Peters, ‘An International Rule of Law’, 2021.

8 We note however, that responsibility for internationally wrongful acts constitutes a defining element of international law, making it ‘coercive’; e.g. Brownlie, Crawford, Kolb.

9 “Law, as a rule of human conduct, and international law, as a rule of the conduct of states, require certainty of application and clarity of subject matter”; (n 3).

10 Freeland, ‘For Better or Worse? The Use of “Soft Law” Within the International Legal Regulation of Outer Space’ (2011).

of treaty adoption, resulting in the OST, the Rescue and Return Agreement (ARRA), the Liability Convention (LIAB), the Registration Convention (REG), and the Moon Agreement (MA), international space law has been grounded in treaty law, “regulat[ing] the relations of states in exploration and use of outer space”.<sup>11</sup> It may be emphasised that these treaties were first adopted unanimously by the UN Committee on the Peaceful Uses of Outer Space (COPUOS), and subsequently adopted by the UN General Assembly, before their ratification by States.

What constitutes rule of law in outer space is more internationalised than ever. Space law is developed by an increased number of participants, including not only new State players joining the space race, but also “international organizations, specialized agencies, private bodies and professional associations that do not nicely fit into the State-centric paradigm of international law-making”.<sup>12</sup> Consequently, at times customary international norms have emerged: for example, the invention of satellites led to the emergence of a norm that satellites above 100 km mean sea level would not be subject to the sovereignty of the State below. While never explicitly decided in a formal treaty, this norm has been an international standard for decades. The shift towards NLBIs is thought to be (at least partly) attributable to the technological complexity of space activities quickly outrunning traditional methods of international law-making.

The absence of formal legal force does not necessarily mean that NLBIs are without *any* legal force. While most NLBIs are widely observed, they do not necessarily meet the definition of customary international law, because they may fail to meet the *State practice*<sup>13</sup> and *opinio juris* prongs.<sup>14</sup> Their chief advantage is that they “[facilitate] international co-operation by acting as a bridge between the formalities of law-making and the needs of international life by legitimating behaviour and creating stability”.<sup>15</sup> From a conservative perspective, NLBIs can be used in the process of interpreting legal norms of the existing five UN space treaties, and thus find relevance even without

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11 Vereschchetin & Danilenko, ‘Custom as a Source of International Law of Outer Space’ (1985).

12 Goh, ‘Softly, Softly Catchee Monkey: Informalism and the Quiet Development of International Space Law’ (2009).

13 Harper, ‘Technology, Politics, and the New Space Race: The Legality and Desirability of Bush’s National Space Policy under the Public and Customary International Laws of Space’ (2008).

14 “Space-faring states have consistently stated that compliance with non[-legally] binding space agreements is not required by international law”, soft law “space agreements fail the *opinio juris* prong on the test”; Wessel, ‘The Rule of Law in Outer Space: The Effects of Treaties and Nonbinding Agreements on International Space Law’ (2012).

15 Shelton, *Commitment and Compliance: The Role of Non-Binding Norms in the International Legal System* (2000).

having any legally binding force.<sup>16</sup> Beyond NLBIs, the rule of law in space continues to advance through the development of national space legislation, and implementing rules and processes. Adopting a flexible understanding of rule of law, one which considers tangible effects of NLBIs, can, possibly, offer a more harmonious and inclusive approach to the development of contemporary international law, particularly in response to emerging realities within the global space economy.

### 3. Legal Developments in International Space Law

The absence or presence of law to pressing issues demonstrates whether and in what way rule of law contributes to the development of law of outer space today. Central to the debate stands the value of NLBIs, as discussed above. In our view, reconciling any contradictions and fostering a more unified and inclusive approach to space governance is crucial for respect and promotion of rule of law in outer space. We highlight the selected examples of space resource utilisation and space sustainability and debris mitigation below.

#### 3.1. Space Resource Utilisation

The use of space resources has been a topic of much discussion in recent years. For instance, the notion of property rights – through the mining of asteroids, extraction of water, minerals, and gases from celestial bodies, or *in situ* recycling – seemingly present challenges to the rule of law in outer space. This is because Article II OST provides that outer space is “not subject to national appropriation”. Article 11 MA sets out that the “moon and its natural resources are the common heritage of mankind” and that an “international regime” should “govern the exploitation of the natural resources of the moon as such exploitation is about to become feasible”. While most States are party to the OST, only few countries have ratified the MA and there currently exists no such ‘international regime’ in practice. Starting in 2015, States parties to the OST – but not to the MA – began to formulate domestic space legislation expressly encouraging commercial exploitation of space resources. For example, the U.S. adopted the *Commercial Space Launch Competitiveness Act*, which unequivocally allows U.S. citizens to “engage in commercial exploration for and commercial recovery of space resources [...] *in accordance with* the international obligations of the United States”.<sup>17</sup> Other countries, such as Luxembourg

<sup>16</sup> Article 31(3)(b) Vienna Convention on the Law of Treaties.

<sup>17</sup> *Commercial Space Launch Competitiveness Act*, § 51302 (emphasis added); U.S. Congress expressly stated in a “Disclaimer of Extraterritorial Sovereignty” that “[i]t is the sense of Congress that by the enactment of this Act, the United States does not thereby assert sovereignty or sovereign or exclusive rights or jurisdiction over, or ownership of, any celestial body”; <https://www.congress.gov/114/plaws/publ90/PLAW-114-publ90.htm>.

(2017), the U.A.E. (2019), and Japan (2021) soon followed suit. These developments were supported by the 2016 Hague International Space Resources Governance Working Group, a multi-stake-holder dialogue comprising both States and non-State actors that in 2019 adopted twenty ‘Building Blocks’ for the ‘Development of an International Framework on Space Resource Activities’.<sup>18</sup> In 2020, NASA along with seven other space agencies, launched the Artemis Accords (Accords), which confirmed the “importance of compl[ying] with the [OST]”.<sup>19</sup> The Accords expressly state that they are a “political commitment” to a “non-binding set of principles” grounded in the OST but reinforce the long-standing U.S. position that space resource extraction “does not inherently constitute national appropriation under Article II [OST]”.<sup>20</sup> Today, the Accords have been signed by both established and new space-faring nations.<sup>21</sup> Russia and China have not joined the Accords and stated their preference for multilateral law-making under the auspices of UN bodies such as COPUOS.<sup>22</sup>

The two distinct approaches to space resource governance, one from the MA and the other from the Accords (to the extent that the Accords may in the future inform legal obligations of their signatories), can potentially create legal conflict and legal uncertainty. By undermining the predictability and reliability of international legal norms governing space activities such disagreements have the potential to erode rule of law in space.

States parties to the MA and the Accords have opted for different ways of resolving potential conflict of norms. A reconciliatory interpretation of the Accords and Article 11 MA is found in Australia’s position; it is both a signatory to the Accords and a party to the MA, but declines to acknowledge a conflict, holding that the Accords “are consistent with Australia’s international legal obligations”.<sup>23</sup> This position can be viewed as a confirmation of upholding the rule of law in outer space, as Australia emphasises its will to act in accordance with its legal obligations. In contrast, Saudi Arabia, also a State party to the MA at the time of becoming a signatory to the Accords, opted to withdraw from the MA effective

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18 <https://www.universiteitleiden.nl/en/law/institute-of-public-law/institute-of-air-space-law/the-hague-space-resources-governance-working-group>.

19 The Accords were launched on 13 October 2020 with Australia, Canada, Italy, Japan, Luxembourg, U.A.E., U.K., U.S.

20 Section 10.

21 In addition to (n 39): Bahrain, Brazil, Colombia, Czech Republic, Ecuador, France, Germany, India, Israel, Mexico, New Zealand, Nigeria, Poland, the Republic of Korea, Romania, Rwanda, Saudi Arabia, Singapore, Spain, Ukraine.

22 [https://russiaun.ru/en/news/261022\\_v](https://russiaun.ru/en/news/261022_v) (Russian Federation); [https://www.unoosa.org/documents/pdf/copuos/lsc/space-resources/LSC2024/English\\_Chinas\\_submission\\_to\\_the\\_working\\_group\\_on\\_space\\_resources.pdf](https://www.unoosa.org/documents/pdf/copuos/lsc/space-resources/LSC2024/English_Chinas_submission_to_the_working_group_on_space_resources.pdf) (China).

23 [https://www.unoosa.org/documents/pdf/copuos/lsc/2021/statements/item\\_14\\_Australia\\_ver.1\\_4\\_June\\_PM.pdf](https://www.unoosa.org/documents/pdf/copuos/lsc/2021/statements/item_14_Australia_ver.1_4_June_PM.pdf).

5 January 2024 (the first State to have ever withdrawn from any of the five United Nations treaties on outer space).<sup>24</sup> The fact that Saudi Arabia withdrew from its legal obligations under the MA, however, in our view, does not mean that the rule of law is being compromised in outer space. Rather, it demonstrates that signatories to the Accords have expressly agreed to comply with the provisions of the OST rather than be seen as breaching them. Importantly, Saudi Arabia's withdrawal from the MA also upholds the principle of *pacta sunt servanda* – and promotes certainty (and rule of law) when a perceived conflict of norms between obligations is perceived (whether legal or political).

NLBIs do not jeopardise the creation of formal rule of law, but rather can be seen as a means supporting it. If anything, the Accords' signatories have promised to use their "experience" under the Accords to "contribute to multilateral efforts" to further develop "international practices and rules applicable to the extraction and utilisation of space resources", including at COPUOS.<sup>25</sup> In 2022, the COPUOS Legal Subcommittee created a 'Working Group on the Legal Aspects of Space Resource Activity' with a five-year mandate to (inter alia) study the "existing legal framework" for the exploration, exploitation, and utilisation of space resources and to assess the benefits of further development of a framework for such activities, "including by way of additional international governance instruments".<sup>26</sup>

These developments show how respect for one's legal or political obligations promotes the rule of law. With regard to the potential conflict of Article 11 MA and the Accords, in our view, two points may be observed: *first*, the Accords offer very limited influence on the interpretation of Article II OST as compared to the MA, the latter having status of a treaty which was unanimously adopted by COPUOS, albeit legally binding for a very few select States; *second*, where COPUOS member States have been unable to agree on new legally binding instruments (at least, for the moment), NLBIs like the Accords may improve the interpretation of existing legally binding obligations for signatory States. The results of the Working Group in the next five years will certainly help clarify the impact of the rule of law on space resources utilisation.

### **3.2. Space Sustainability and Debris Mitigation**

Space sustainability and debris mitigation is another fast-evolving domain where the space law double-helix can be observed. Although the OST, LIAB, and REG are relevant, they do not alone sustain rule of law in outer space. For one, the central principles of being 'internationally responsible for national activities' (Article VI OST), international liability (Article VII OST),

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24 <https://treaties.un.org/doc/Publication/CN/2023/CN.4.2023-Eng.pdf>.

25 <https://vienna.usmission.gov/2022-copuos-lsc-u-s-on-space-resources/>.

26 <https://www.unoosa.org/oosa/en/ourwork/copuos/lsc/space-resources/index.html>.



registration of objects launched into outer space (Article VIII OST), and having ‘due regard’ of others (Article IX OST) provide core tenets for future space legislation.

NLBIs offer a path to formal rule of law in this field, including through the IADC Guidelines for Space Debris Mitigation (space agencies), the LTS Guidelines (States), the recent WEF Space Industry Debris Mitigation Recommendations (private actors), and ISO Standard 24113:2023 (‘Space debris mitigation requirements’). Guidelines often carry disclaimers of being ‘non-legally binding’ under international law (thus lacking *opinio juris*), but may nonetheless exert some power because they functionally influence the behaviour of their addressees.

We are of the belief that even where there is no recent ‘formal’ framework, NLBIs have had a tangible impact on rule of law. To properly measure such impact, it is instructive to consider how NLBIs interact with national regulatory laws through (a) detailed implementation mechanisms, (b) sanctions for failure of compliance, and/or (c) contractual clauses (functioning as a domestic legal compliance element). For example, the 25-year rule for de-orbiting a satellite after its end of life is not an international legal norm but a highly complied practice between both State and non-State actors, with some countries looking to introduce even lower limits (e.g. U.S., EU).

#### 4. Towards a Functional Rule of Law in Outer Space

Fifteen years ago, Professor Stephan Hobe warned that “in the realm of non-legally binding rules, no State is under a strict obligation to honour international law” and that the “observance of the international rule of law is in a severe crisis with regard to outer space activities”.<sup>27</sup> Under this perspective, a threat to the rule of law arises when there is inadequate regulation and coordination among space actors, leading to congestion, risks of collisions, and potential damage to space infrastructure. For instance, the rise of innovation in space created a need for clarity on intellectual property rights in space. While the IGA governing the ISS covers this issue contractually, a global framework is still lacking. Differences in monitoring capacity, information-sharing and standards applied by space actors generate their own subset of problems to the notion of rule of law in outer space.

At the same time, dichotomous categories and theoretical debates on formal and substantive notions of rule of law do not adequately reflect the need for rule of law in outer space today. In focusing solely on the form or the content of a legal instrument, a *lacuna* exists as to the full slate of lived experiences of today’s space actor, writ large; this is particularly the case since we are currently witnessing a ‘boom’ in the participation of non-State actors in space. We miss questions such as: what are the expectations of the space

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<sup>27</sup> Hobe, ‘The Importance of Rule of Law for Space Activities’ (2008).

actor(s) in light of the instrument? And do the space actor(s) voluntarily self-constrain their actions due to the instrument? Even though the Accords comprise mere political commitments (which may be substantively controversial), a growing class of signatories will nonetheless develop compliance with such principles and expect that their peers do the same. We believe that this promotes rule of law more than it detracts from it.

Accordingly, we propose extending the notion of rule of law in outer space to a ‘functional rule of law’, which accommodates for the lived reality of State and non-State space actors alike. The functional rule of law today is an organic buffet of industry guidelines, academic projects, and even contractual clauses, all of which prop up the domain of what would otherwise be outer space regulation at a functional level. For this reason, advancing the space law ‘double helix’ requires adjusting our perspectives on the ways in which space actors interact with international and national space law today. Regulation of space activities is advancing quickly at the domestic level due to private space activities, and at least 33 countries have already given permission to add their national space laws, policies, and regulations to UNOOSA’s novel database ASTRO.<sup>28</sup>

Adopting a functional lens to rule of law looks to the ‘effect’ of a particular instrument and not only its form or content. The effect a particular instrument has on space actors impacts their ability to formulate expectations, their ability to rely on such expectations, and finally to adjust such expectations as needed. A functional approach to the rule of law has the following features:

- It acknowledges the fact that space activities: (a) involve a growing population of non-State and State actors alike; (b) are not only national or international, but intrinsically transnational with both domestic and international legal elements; and (c) are realistically governed both by legally binding instruments and NLBIs, the latter creating effects despite any formal legal status.
- It takes a broad view of ‘instruments’, one that includes not only ‘hard’ laws, but also recognises the function of traditional ‘soft law’ elements like guidelines, recommendations, best practices, and industry behaviours and customs. This approach likewise seeks to incorporate domestic notions of rule of law, including specifically those pertaining to national space legislation, policies, and guidelines, which similarly generate expectations, albeit at the domestic level.
- The functional approach at its core makes no value judgment on the appropriateness of any such ‘rule’ – whether domestic or international – but merely looks to its clout.

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28 <https://astro.unoosa.org/astro/en/index.html>.

- It recognises that there are more and less ‘acceptable degrees of adherence to rule of law’. On a sliding scale of rule of law, the greater the effect of the instrument, the greater the expectation for adherence and conformity.<sup>29</sup>
- Space actors contribute to the rule of law in outer space through self-imposed constraints, and/or through conscious decisions to abide by specific instruments, which allow them to join others in benefitting from certainty and reliability of the framework.

In sum, the functional approach to the rule of law takes the position that our notion of rule of law must be realistic, practical, and useful to the diverse and expanding participants of the international space system.

## 5. Conclusion and Outlook

In the early days of space law, it was feared that ‘chaos and disaster’ may erupt if space activities were not formally regulated. After formal regulation, decades of resort to NLBIs ensued, because space activities were carried out by a growing number of both non-State and State actors, were increasingly transnational, and were realistically governed by both legally binding instruments and NLBIs. The functional understanding of rule of law aims at a realistic, practical, and useful understanding of rule of law that is relevant to all space actors.

What does all of this mean in practice? And can we measure the ‘effects’ that new and old instruments have on space actors today? Inspired by the many existing rule of law research and materials, including the World Justice Project Rule of Law Index,<sup>30</sup> the Afrobarometer,<sup>31</sup> and the Council of Europe Rule of Law Checklist,<sup>32</sup> we propose the creation of an issue-based *Space Rule of Law Index*, which helps measure the effect that treaties, national laws, guidelines, contracts, and industry norms and practices have on the expectations and behaviour of space actors. The ‘indicators’ of any such index, we believe, should be developed on an issue-by-issue basis to help

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29 Note in this respect Wessel: “High-level principles, such as claims of territory and military activities in space, assistance to astronauts, and liability for damage caused by space objects, require a high degree of compliance with the rule of law in order to inform states of their basis rights and responsibilities [...] in contrast, technical-level best practices [...] require a high degree of flexibility [non-legally binding instruments] provide this flexibility while still supporting an acceptable degree to the adherence of the rule of law”; (n 14).

30 <https://worldjusticeproject.org/rule-of-law-index/>.

31 <https://www.afrobarometer.org/>.

32 [https://www.venice.coe.int/images/SITE%20IMAGES/Publications/Rule\\_of\\_Law\\_Check\\_List.pdf](https://www.venice.coe.int/images/SITE%20IMAGES/Publications/Rule_of_Law_Check_List.pdf); see also the UN Rule of Law Indicators (2011), [https://peacekeeping.un.org/sites/default/files/un\\_rule\\_of\\_law\\_indicators.pdf](https://peacekeeping.un.org/sites/default/files/un_rule_of_law_indicators.pdf).

bridge intergenerational and international divides and measure adherence to rule of law, including specifically on contemporary issues such as space resources and space sustainability.

This lecture has attempted to address the role and significance of rule of law for activities in outer space. We presented the foundations of various notions of rule of law, linked it to contemporary space problems (resource utilisation, space sustainability) and recognised its importance, especially with respect to new technologies, that are challenging existing limits of space law. We shared our views on how, in light of contemporary challenges and developments to legal regulation for outer space, the IISL and the space law profession at large may continue the important task of advancing the space law ‘double helix’ – the expansion of the rule of law and the promotion of further development of space law – including through NLBIs under a functional approach to rule of law. Going forward, we propose the creation of a *Space Rule of Law Index* taking into account tangible effects of NLBIs that can assist in clarifying the patterns of behaviour of space actors and the reliability and predictability of their activities in space.