

### **Session E7.3: National Space Legislation – Harmonisation and Enforcement**

*Co-Chairs: Dr. Ranjana Kaul and Frans von der Dunk*

*Rapporteur: Scott Parry*

Session E7.3 included a total of 12 presentations of various submitted papers addressing the topic of harmonisation and enforcement of national space legislation. Following Prof. Frans von der Dunk's opening remarks and introductions of the Co-Chairs and Rapporteur, the order of presenters was clarified; generally grouping the presentations as follows: (1) overarching issues of national space laws and their harmonization and enforcement; (2) regional contexts for national space legislation; (3) specific new national space laws and regulations; and (4) some *capita selecta*. Also, it was announced that time for questions and discussion would be deferred until the very end of the Session. Throughout the Session, Dr. Kaul introduced each individual presenter in turn, and Prof. Frans von der Dunk resorted only occasionally to playing the didgeridoo to end a speaker's allotted time.

To begin the Session, Mr. Vincent Seffinga and Ms. Mari Eldholm jointly presented their paper, entitled "The Fragmentation of International Space Law." Their study highlights variations and divergence between national interpretations of what it means to "carry out a space activity" under Article VI of the Outer Space Treaty. They discussed the need to both coordinate and operationalize the Treaty toward developing the law, to avoid the negative consequences of the fragmentation of international space law.

Mr. George Long then discussed his paper entitled "Legal Basis for a State's Use of Police Power Against Non-Nationals to Enforce its National Space Legislation and Responsibilities Imposed by the Outer Space Treaty." He asserts that a legal basis may exist for a State to exercise its police power over a non-national private entity if that State deems itself the 'appropriate State' to authorize and supervise that entity's space activity, even if the non-national is not on board a space object registered to the enforcing State.

The third and fourth presentations were delivered by the University of Nebraska's Prof. Frans von der Dunk, and Prof. Matthew Schaefer, respectively. Co-Chair von der Dunk's "Scoping National Space Law: The True Meaning of 'National Activities in Outer Space' of Article VI of the Outer Space Treaty" considers actual State practice in interpreting 'national activities in outer space' from a 50 year survey of over two dozen national space laws. Toward a proper interpretation, he observes that 'national activities in outer space' has almost uniformly been interpreted as including activities over which a State can exercise its jurisdiction, i.e., activities conducted by nationals, from national territory or from national quasi-territory, such as ships and aircraft. Prof. Schaefer's paper, "What Level of Detail in National Space Legislation is Ideal for the Harmonization and Enforcement of Such Legislation and International Space Law?" contrasts the legislation of such countries as the U.S., Belgium, South Africa, Sweden, and the U.K., in which legislative detail is omitted, with the more detailed legislation of New Zealand, to encourage greater detail in national space legislation regarding what the Outer Space Treaty requires, toward achieving a greater coalescence of views that will grow broadly-agreed upon interpretations.

Next, the fifth presentation was by Mr. Joel Lisk. His paper, entitled "Emerging Provisions of Domestic Space Law," considers those pressures that are shaping national domestic legislation toward equilibrium with rapidly changing industry needs. He underscores the primacy of the tension between compliance with international obligations under the

international treaty regime and industry pressure to relieve from regulatory compliance requirements, to foster a viable space sector and make undertaking space activities easier.

After Mr. Lisk, Dr. Marco Ferrazzani presented “The role of intergovernmental organisations in assisting the development and implementation of national space law: an exploration of the rationale, mandate and limits as exemplified by the European Space Agency.” Dr. Ferrazzani observes that the European Space Agency’s focus is one of advice, fulfilling a ‘hub’ function providing legal and technical expertise. In this regard, it is dedicated to simultaneously observing and implementing international law for the member States, while reinforcing the purpose, character, and legal personality of IGOs as tools at the Member States’ service.

The seventh presenter, Dr. Sylvia Ospina, discussed “Emerging Economies' Contributions to Space Activities and Legislation.” She details a dispute over 5G C-band frequency and the challenge to coordinate frequencies for programs that plan to launch 800 – 12,000 satellites at a time, and concludes that in countries with emerging market economies that aspire to participate in space activities, the issue of cost, and cost recovery, will likely leave rural and low-income populations underserved as operators provide high-speed low latency services to corporations to monetize their investment, rather than to individual customers.

Following Dr. Ospina, Prof. Mahulena Hofmann presented her paper, “Space Legislation of Luxembourg.” Prof. Mahulena details both Luxembourg’s recent adoption of a specific space resources legislative framework in response to a perceived imminent need for space operators to have a transparent document to define their obligations and rights, and an even more recent draft of general space law (currently within the legislative process), to address all other space activities which may result in international responsibility and eventual international liability.

Next, Prof. Christopher Newman presented ninth. His paper, entitled “The Space Industry Act 2018: Unlocking the UK Space Economy?” evaluates the UK’s Space Industry Act 2018 as a means to regain an independent launch capability and establish a number of small satellite launch facilities within the UK. While the legislation represents a framework to build upon rather than a definitive final regulation of space activities within the UK, Prof. Newman observes that as the EU is ESA’s largest source of funding, and although there are non-EU member states of ESA, Brexit will initiate a transition of the UK space sector away from complimenting EU space policy, and toward the UK as a competitor to the EU space industry.

The tenth paper, “A tale of two space authorities: The interplay between NASA and the National Space Council,” was presented by Hannah Kohler. She provided an historical overview of the U.S. National Space Council in relation to NASA, and identifies its common guiding thread. She notes U.S. space policy directives that have rearranged goals to now focus on: a return to the Moon and Mars, an American First Among the Stars directive that, among other things, sets out pillars for a unified approach and streamlines rules and regulations, space traffic management, and the establishment of a Space Force as a 6<sup>th</sup> branch of the U.S. Armed Services. She observes that the consistent guiding thread is the intention to consult with and coordinate industry, civilian, international, and domestic security and defense interests.

Mr. Philippe Clerc then discussed his paper, entitled “National space legislations challenged by on-orbit services in the context of new space. Limits, current solutions and international perspectives.” Premised on the idea that current national space laws appear unsuited to promote on-orbit service providers, Mr. Clerc considers adopting an Active Space Operator definition, a procedure for foreign transfers of the command of a space object to another space operator, a simple rebuttable assumption of waiver of claims between all

participants to the on-orbit servicing, the extension of such principles as Good Samaritan Laws, a liability burden placed on the Active Space Operator responsible for the command of the operation at the time of damage, and mitigation in proportion to the proven fault of the victim up to a ceiling of indemnification.

The twelfth and final presenter, Mr. Martin Svec, discussed “Investment protection provisions in national legislation and their potential to ensure long-term compliance of national space legislation with the principles of international law, particularly international space law.” First noting that whereas industry likes national legislation because it authorizes their activities, investors do not like legislation because it impedes progress, Mr. Svec discussed investment protection of space sector investments as a significant stimulus to private investment. He promotes the use of investment law as a core policy tool to promote investment by mitigating risks inherent in a future host-state intervention, and suggests that diplomatic protection under special circumstances may provide a viable additional layer of protection.

At the end of the speakers’ presentations the floor was opened with a generous amount of time for questions to any of the speakers who had presented throughout the Session. Questions included why it is necessary to have two separate parallel legislations as observed from the Luxembourg and UK legislation, how we perceive developing country dependence on advanced space faring nations, and whether the UNCOPUOS model law for space legislation will lead to greater harmonization. From these questions evolved a robust, participatory, vigorous, and engaging exchange of opinions, ideas, and debate that engaged speakers, audience members, and Co-Chairs alike, and generated further consideration of other areas touched upon by the presenters specifically, and the topic area generally.

At the conclusion of the Session’s time, the Co-Chairs offered some brief concluding remarks, thanked the speakers and the audience, and adjourned the session.