

50th Session of the UNCOPUOS Legal Subcommittee  
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**‘A New Look on the Delimitation of Airspace and Outer Space’**

REPORT

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At their annual symposium for the 50<sup>th</sup> session of the UNCOPUOS Legal Subcommittee, the International Institute of Space Law (IISL) and the European Center for Space Law (ECSL) addressed the theme “A New Look on the Delimitation of Airspace and Outer Space”. Several scholars presented their views on this complex space law issue, under the chairmanship of Ms. Tanja Masson-Zwaan (President IISL) and Professor Sergio Marchisio (Chairman ECSL).

As a representative of the young scholars, Ms. Catherina Doldirina, from McGill University’s Institute of Air and Space Law, opened the event presenting the history of the long standing debate as to the delimitation of air space and outer space, indicating that it has been on the agenda of the UNCOPUOS legal subcommittee since the 1960’s. Among the current positions, she distinguished the “no present need theory”, according to which no delimitation is possible nor necessary; the “functional approach”, focused on the nature of the activity and not on the place where it takes place; and the “spatial approach”, which, using different criteria, defends the provision of a clear boundary between air space and outer space. Throughout the years, proposals to the solution of the stalemate were presented by different delegations before the UN, but no agreement on this issue has been accomplished to this moment.

Dr. Luboš Perek, from the Learned Society of the Czech Republic, offered an interesting scientific point of view to the matter. After reviewing recent technological changes on space activities, he argued that, even though a region where a delimitation of the air space/outer space boundary may be indicated in compatibility with physical facts, science should not be blamed for the absence of a treaty rule on this subject. Considering international practice, Dr. Perek concluded that a rule of customary international law has evolved, according to which satellite orbits are considered as being in outer space; therefore, space law has to be applied to events occurring in orbit, that is, above 100 km altitude.

Next presenter was Professor Marco Pedrazzi, from the University of Milan, who acknowledged that air law does not define the notion of air space, nor establishes its upper limit, but guarantees to states complete and absolute sovereignty over the air space above their territories. On the other hand, space law applies a regime of freedom to outer space, a region not legally defined. Considering several domestic legislations related to aeronautical and space activities, Professor Pedrazzi concluded that most national laws do not contain any clear indication on the boundary line between air space and outer space, except for the exact but divergent provision of the Australian Space Activities Act of 1998 (as amended), that

codified a boundary at 100 km for domestic purposes. Nevertheless, international law and most municipal laws seem to converge on the fact that outer space begins where orbital flight becomes possible.

The legal implications of a delimitation of air space and outer space were addressed by Professor Joanne Irene Gabrynowicz from the University of Mississippi. She argued that an amendment to treaty law to delimit outer space may require this to be then fully implemented at the national level. She explained that, while delimitation is a process for determining land and maritime boundaries of a state, demarcation is a further and separate procedure for making a line of delimitation. Both demarcation and delimitation practices have to be adapted to the specific features of the space environment and space activities, since, in the words of Professor Gabrynowicz, “the drawing of a line could be a beginning rather than an end”.

Professor Sang-Myon Rhee, from the University of Seoul, considered commercial and technological aspects involved with activities that may take place in air space and/or outer space, including sub-orbital flights, the space elevator project and space tourism. Following a presentation of current and future projects encompassing, in whole or in part, activities at high altitude, Professor Rhee suggested that air space, subject to absolute national sovereignty, should be limited up to 50 km from the sea level. Above it, the provision of a contiguous space was proposed, authorizing innocent passage until an altitude of 100 km. Beyond that, outer space, not subject to state sovereignty, would commence.

The last presentation was given by Mr. Jean-François Mayence, from the Belgian Science Policy Office, on the topic of space traffic management. It was

considered that such an endeavor would require an objective set of rules and universal application to be effective, but not the delimitation between air space and outer space *per se*. In any case, Mr. Mayence concluded that when an object operates in an area where other objects operate as well, common rules must be applied in order to ensure safety and smooth traffic. Such a set of rules should include a mixed approach that applies functional and geophysical methods to fully defined criteria and notions.

Appreciation for the symposium was first expressed by Mr. Ahmad Talebzadeh, Chairman of the UNCOPUOS Legal Subcommittee, who highlighted that the subject has been discussed since a long time and still awaits a solution, and then by Professor José Monserrat Filho, Chairman of the Working Group on Matters Relating to the Definition and Delimitation of Outer Space of the UNCOPUOS Legal Subcommittee, who gave concluding remarks in favor of the further study of this topic in order to reach a common understanding, designed to safeguard legal security, and possibly based on a mixed approach that combines the different theories envisioned.

Delegations to the UNCOPUOS Legal Subcommittee praised the symposium, the institutions that organized it and the presenters, and felt that the symposium had accomplished its purpose of providing an in-depth analysis on the definition and delimitation of outer space, thus contributing to the further development of space law.