Summary of the Eighth Regular Meeting of the IAA/IISL Scientific-Legal Liaison Committee

1. Date and Place

Naples, Italy – Thursday, 04th October 2012, 13:15–14:00

2. Participation

Schrogl (Chair), Haese (Acting Secretary), Molette, von der Dunk, Smith.

3. Roundtable 2012, "Optical Communications"

Beginning: 10:15, ending 13:15; four invited speakers.

More than 50 participants joined the IAA/IISL Scientific-Legal Roundtable, which was held in the frame of the IAC2012. As in the previous years the meeting could benefit from the participation of the President of the IISL, Tanya Masson-Zwaan, and the Secretary General of the IAA, Jean-Michel Contant, who both had been invited by the IAA/IISL Scientific Legal Liaison Committee to deliver the welcome speeches for this Roundtable. The Chairmen introduced the topic and the speakers.

The presentational part of the Roundtable was opened by Bernard Laurent of EADS-Astrium who provided a very informative introduction to the application of the technology. He recalled the advantages of optical communication for business use and its major constraints. Erich Auer of Tesat provided an interesting insight in the technology itself as well as some demonstration missions. Those have shown the practicability of the technology also for commercial applications. Mahulena Hofmann from the University du Luxembourg gave the first legal presentation underlining that the ITU is the appropriate body dealing with regulations and standards and that also the Law of Outer Space is applicable, both providing a general legal framework. Yvon Henri from the ITU reported on the outcome of the World Radiocommunication Conference 2012 (WRC-12). It has been recognized that the commercialization and extensive use of bands for optical communication are still far in the future and that there is no immediate threat to the passive services used by the scientific community. It has been decided not to change the Radio Regulations for free-space optical systems. Subsequently to the presentations, both the speakers and the audience engaged in a lively and thought-provoking discussion addressing diverse aspects of the topic. The following conclusions and key points have to be noted: There is general agreement in the community that currently new regulations are not required, but might be considered in the future. – Standardisation is to be seen separately from regulatory actions and is being addressed in international bodies. - Safety against interference remains an open question as long as there are no extensive systems in operation that might be targeted. – Generally, the question of liability in case of damage is to be addressed.

The Committee was highly satisfied with the composition of speakers and topics, and the interaction between the panel and the audience. In order to enhance promotion of the Roundtable in the run-up to future IAC's, all invited speakers shall submit an abstract via the official IAC procedure, e.g. to increase visibility in the conference programme.

4. Preparation for the Roundtables in 2013, 2014 and 2015

<u>Roundtable 2013:</u> Title: "Space and the polar regions". Chairs: Kai-Uwe Schrogl and G. Hovmork (Norway). Speakers: Stefan Hobe from the University of Cologne has already expressed his interest in participating in the Roundtable. Others are TBD and to be invited.

Roundtable 2014: Shall address the misuse of satellite data e.g. by users or operators, a topic related to space security. The Roundtable should build awareness and show the existing potential for misuse of satellites. Chairs: Frans van der Dunk and a technical expert, TBD. Speakers: 4-5 international experts. – F. v.d. Dunk will propose a 'catchy title' and draft a brief description.

<u>Roundtable 2015:</u> Topic is TBD, one suggestion is Commercial Space Flight, addressing medical, legal and other issues. – The Committee members are invited to propose alternative topics.

5. Next Meeting

During IAC 2013 in Beijing, China, right after the Roundtable.