

## **Summary of the Seventh Regular Meeting of the IAA/IISL Scientific-Legal Liaison Committee**

### **1. Date and Place**

Cape Town, Thursday, 06th October 2011, 13:00 – 13:50

### **2. Participation**

Schrogl (Chair), Rohner-Willsch (Secretary), Molette, von der Dunk, Sandau, Lala, Smith, Satoh, Klinkrad, Apologies received from Mendell (Co-Chair)

### **3. Roundtables 2011 and 2012**

*Roundtable 2011:* Beginning: 10:15, ending 12:50. From 5 confirmed speakers, 4 did present, one could not come to Cape Town.

As in the previous years the Liaison Committee could win the president of IISL, Tanya Masson-Zwaan, and the Secretary General of IAA, Jean-Michel Contant, to give a welcome speech. Kai-Uwe Schrogl introduced the topic and the speakers. Nicola Rohner-Willsch announced and distributed the 25 years IAA/IISL Scientific Legal Roundtables booklet.

The 2011 topic "Space Debris Remediation" of the 26th IAA/IISL Scientific legal Roundtable did apparently meet the interest of more than 60 conference participants.

Heiner Klinkrad started the lectures with an outstanding presentation about of the results of the IAA study on space debris environment which were an excellent entry to the following presentations about economic and legal aspects as well for the discussion. Carsten Wiedemann reported in his contribution about space debris mitigation measures and cost issues. He appealed to remove at least the 20 targets with the highest probability of a catastrophic collision in spite of the high estimated costs. The legal part of the roundtable topic was represented by Catherine Doldirina, the policy part by Jana Robinson. Doldirina presented critical legal issues in "cleaning up" outer space. She discussed i.e. obligations for immediate de-orbiting at EoL; removing of risk objects by a third party, responsibilities of collisions. Robinson reported about space debris remediation and space security concerns, under it efforts to advance safety and security in space, the urgency of more space situational awareness (SSA) and possibilities for more transparency and confidence-building. The discussion concluded with the following common points: 5 or more missions per year are urgent to bring back satellites, probably in cooperation with Russia. The costs are immense and can only be managed in international cooperation, maybe by implementing an international fund. In this case it must be discussed who could be such an authority to collect money and to decide about the missions. Technical options are available and can immediately put in practice. Politics must be comprised to push new governances.

The speakers presented in the time permitted, it was enough time for discussion. Further the Committee suggests that from 2012 on the speakers upload an abstract to ensure the listing of the titles in the program (no paper requested).

*Roundtable 2012.* The topic is "Optical Communication". Chairs Pierre Molette and Masahiko Sato. The technical side could be covered by ESA with developing optical systems, by Astrium with a report about Artemis (Bernard Laurent), ITU (Atila Matas) and another technical presentation from Japan or USA. For the international policy Prof. Lucien Rapp could be a possible speaker.

### **4. Topic for the Roundtable in 2013**

Possible topics for 2013 could be "Uses and misuses of space data" with presentations about space and GNSS; Navigation systems; GPS, Coherence of receivers, PPP. Frans von der Dunk offers to be a speaker. Kai-Uwe and Frans will prepare the roundtable. Chairs are not decided yet. Another topic could be "Space and the Arctic".

### **5. Next Meeting**

During IAC 2012 in Naples, right after the Roundtable (foreseen for Thursday morning).