

Report on the 2011 ECSL Practitioners' Forum

The 2011 ECSL Practitioners' Forum was organised on 18 March at ESA Headquarters in Paris. The organisation was taken care of once again by the ECSL Executive Secretary, **Mr. R. Milchberg**, in close cooperation with the ECSL Chairman, **Prof. Dr. S. Marchisio**, of the University of Rome 'La Sapienza', and the Coordinator of the Practitioners' Forum, **Prof. Dr. F.G. von der Dunk**, of the University of Nebraska-Lincoln. Five years after a previous Practitioners' Forum had addressed legal issues of space tourism for the first time, it was time for this theme to be revisited and addressed in more practical detail: hence, the title of the forum was "Manned Spaceflight Safety Issues: Legal & Policy Aspects". The forum was attended by some 55 participants from various institutional, commercial and academic professions across Europe.

After some welcoming words on behalf of ECSL by **Prof. Marchisio** he also introduced ECSL to those uninitiated as of yet and handed the floor to the Chairman of the morning session on *The public authorities' perspective*, **Dr. M. Ferrazzani**, Legal Counsel and Head of Legal Department at ESA.

Prof. Von der Dunk then introduced the forum's topic, highlighting the most relevant developments in respect of, in particular, Virgin Galactic and Space Expedition Curacao as the two companies closest to making private manned spaceflight a reality.

The second speaker was **Dr. M. Caporicci**, on the "ESA Approach for Human Transportation Systems and Associated Safety Aspects". He addressed the various possible applications of private suborbital spaceflight operators in particular from the ESA perspective and the consequent interest of the Agency in partnerships for future technology development, focusing on microgravity as one particular area of interest. He also briefly summarised the Request for Information (RFI) procedure as applied in this context, and analysed the twelve answers that had been received from various potential partners.

Dr. T. Sgobba, Head of the Independent Safety Office at ESA, took charge of the second part of the presentation on the "ESA Approach for Human Transportation Systems and Associated Safety Aspects", and addressed *inter alia* the complicated issue of regulating private spaceflight, noting that at least two fundamentally different configurations, with fundamentally different safety requirements were at issue here. Also, he addressed the option of self-regulation, before concluding that 'no regulation is no option'.

The fourth speaker was **Dr. A. Farand**, of ESA's Legal Department, on "The European Space Agency and internal regulation regarding the safety of manned spaceflight". Speaker highlighted that manned spaceflight in the context of the Agency's activities had always been legally classified as optional programmes, before focusing on the two main elements of ESA's regulatory framework for those activities; the relevant Programme Declarations and the ISS Agreements.

The next speaker was **Mr. J. Sloan**, of the Office of Commercial Space Transportation with the FAA, on "The US FAA and licensing commercial space transportation". Mr. Sloan dealt with the responsibilities of the FAA under the Commercial Space Launch act as encompassing both a duty to regulate the safety of such activities, and a mandate to stimulate and promote the interests of this infant industry. He made clear that, most fundamentally, regulatory standards were supposed to evolve as the industry matures –

and not before; meaning that the sunset clause referring to 2012 would effectively be extended as to its intended effect of not starting regulation before sufficient experience had come about with relevant manned spaceflight activities.

Mr. Sloan was followed by **Mr. J.B. Marciacq**, Rulemaking Officer-Initial Airworthiness with EASA's Rulemaking Directorate, who spoke on the "EASA proposed approach regarding the certification of Sub-orbital Aircraft (SoA)". In the context of this subject, he addressed in detail EU Regulations 1592/2002/EC, on airworthiness and environmental compatibility; 216/2008/EC, on flight crew licensing and operations, including third country operations; and 1108/2009/EC, on the safety of aerodromes and Air Traffic Management/Air Navigation Services. He amongst others detailed that, different from the FAA, EASA had no authority to regulate operations not even partially conducted within the Union.

The last presentation before the lunch break was that of **Prof. S. Mosteshar**, Director of the London Institute of Space Policy and Law, who took "A more academic perspective on commercial spaceflight and spaceport operations". He addressed issues such as the definitional ones – space object *versus* aircraft, airspace *versus* outer space – and the liability issues from the space perspective in particular, and proceeded to compare US developments (including US court approaches and individual states' legislations, such as those of Texas, Virginia, New Mexico and Florida) with EU and UK law legislation on liability.

After the lunch, under the Chairmanship of **Dr. P. Hulsroj**, Director of Legal Affairs and External Relations at ESA, the afternoon session on *The private industry perspectives* essentially consisted of a panel of experts, including **Mr. B. Droste** presenting the plans of Space Expedition Curaçao (SXC), **Mr. R. Harillo** of Stardust Consulting introducing the plans to develop a spaceport in Barcelona, and **Mr. T. Ploschansky** introducing the International Space Transport Association (ISTA).

An interesting and extended **discussion** followed, which also engaged the audience. Issues raised included the insurance cover for passengers; current legislation requirements, in that respect which if following US approach, would not require passenger insurance whilst as of yet there is neither other national legislation addressing this at all, nor international law requiring it; the need for authorities to change the law to accommodate private commercial spaceflight; and questions of amending air traffic rules to accommodate commercial spaceflight.

Finally **Prof. Von der Dunk**, on behalf also of Prof. Marchisio thanked ESA for usage of the main Room at ESA Headquarters, ECSL for organising the Forum, especially Mr. Milchberg, Executive Secretary of ECSL, as well as all speakers and the audience, and wished everyone safe travels.

Frans G. von der Dunk