



Promoting Cooperative Solutions for Space Sustainability

Viewpoints on the State of Space Security in 2011

On June 22, 2011, Secure World Foundation held an event at the Canadian Embassy on the launch of the 2011 Space Security Index (SSI)'s [executive summary](#), which examined the major space security events of the past year and surveyed the present state of space security. The guest panel, featuring Mr. Cesar Jaramillo of Project Plowshares, Mr. Andrew D'Uva of Providence Access Company, Dr. Scott Pace of the George Washington University's Space Policy Institute, and Ms. Patricia Cooper of the Satellite Industry Association, was moderated by Ms. Victoria Samson of Secure World Foundation and introduced by Mr. William Mackey of the Canadian Embassy.

Jaramillo presented the structure of the 2011 SSI. He pointed out that this was the 8th SSI, and said that they hoped this project would enhance policy discussions on space security. The SSI's chapters covered three themes:

1. The condition of the space environment including: space situational awareness, space laws, policies, and doctrines.
2. The types of space actors and the uses of space for civil, commercial, and military purposes.
3. The status of space-based technologies, in particular space systems' resilience and space systems' negation.

Some of the important trends discussed in this year's report include:

- The amount of debris created from a 2007 Chinese anti-satellite test (3000 pieces at last count)
- Expansion of the U.S. Space Situational Awareness (SSA) data-sharing program with international partners
- The proposed International Code of Conduct for responsible space behavior
- Iran's jamming of some European telecommunication satellite broadcasts, most notably BBC Persia news broadcasts provided by Eutelsat.

D'Uva discussed the motivations for Space Data Association's (SDA) creation: enhancing the safety of flight, creating an "information depository," establishing support for electromagnetic interference (EMI)/radio frequency interference (RFI) geolocation and resolution, creating "efficient, timely and accurate conjunction assessments," and encouraging the evolution of best practices for its members. D'Uva stressed the importance of cooperation between government entities and industry members in creating a safer, more stable space environment. He used the analogy that satellite operations in space are a lot like driving a car down the freeway blind-folded and changing lanes without signaling; SDA, he said, would be the equivalent of putting turn signals on satellites. D'Uva went on to discuss the measures that the SDC is presently performing, including collision avoidance monitoring, radio frequency interference mitigation, and offering authoritative contact information for SDA members. He noted SDA is currently providing collision avoidance monitoring of 222 satellites for 15 geostationary Earth orbit (GEO) satellite operators and for 112 satellites for 7 low Earth orbit (LEO) satellite operators. D'Uva concluded by saying that we need to put in place agreed, practical norms of behavior.

Pace began his presentation by discussing the events of the June 2011 meeting of the United Nations Committee on Peaceful Uses of Outer Space (COPUOS). He noted that some countries are uncomfortable

with non-state actors getting involved in discussions on space security. Pace also pointed out that one of the difficult issues for moving ahead with international discussions on space security is the lack of an acceptable venue, as the two places that would normally cover this issue - the Conference on Disarmament (CD) and COPUOS – may not be the most effective forum in this particular circumstance. The CD has been completely blocked up, while COPUOS may have problems incorporating the efforts of the private sector (which really do need to be included in these types of discussions). No matter the venue, he concluded that space needed to be part of the overall international strategic dialogue.

Cooper argued that the partition between the commercial satellite industry and space policy is beginning to erode as the commercial sector begins to gain credibility. According to Cooper, export controls placed by congress on satellites have had negative consequences for the U.S. satellite industry. Classifying satellites as munitions has, she claimed, distorted international trade, dampened investment, and discouraged innovation and education. Overall, export controls on satellites have unnecessarily and severely detracted from U.S. market share while simultaneously weakening U.S. competitiveness in international markets. While she acknowledged that negative impacts have been small as yet, she was cautiously optimistic that a movement to change the regulations on the sale of satellites is being generated by U.S. leaders.

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