Paper ID: 79858
oral

IISL COLLOQUIUM ON THE LAW OF OUTER SPACE (E7)
Supervision of Space Activities (5)

Author: Mr. Kazushi Kobata
Japan Aerospace Exploration Agency (JAXA), Japan, kobata.kazushi@jaxa.jp

ENHANCING THE PRACTICE OF NON-FUNCTIONAL SPACE OBJECT REGISTRATION BY UTILIZING SSA DATA: LESSONS LEARNED FROM THE JAPANESE PRACTICE

Abstract

For the safe, stable and sustainable use of outer space by all sectors, it is so important for each state to create the effective and internationally harmonized national mechanism for tracking and monitoring the space object and its registration in the national registry, in view of enabling the authorization and continuing supervision. Especially, states capable of launching space vehicle should be required responsible behavior, since their practice could form the de-facto international standards of cutting-edge space operations and utilization. On the other hand, a part of these countries, such as Russia and China, do not have the practice of, for example, registering the "launch vehicle and parts thereof" which launches the space object, although this element is clearly included in the definition of the term "space object" in the Registration Convention. It would apparently cause the challenges to secure the safe, stable and sustainable use and realize transparency and confidence building measures (TCBM) in outer space.

The purpose of my thesis is to evaluate how Japan has been enhancing the practice of non-functional space object registration by utilizing the SSA data as reference, and to analyze how Japan has tried to align with principles of international space law to harmonize with the practice of other states capable of launching space vehicle. This indicates that identification of the upper stage and component parts of launch vehicles, including those of satellite for national security, by using SSA data such as Space-Track data has been working effectively, which has assisted their registration in the national registry. This practice should be significant today, taking into consideration that the attribution of space object has important legal effect in terms of liability since the demonstration mission of active debris removal (ADR) and on-orbit servicing (OOS) will occur soon, which may have negative impact to space object which could be under jurisdiction and/or control of other nations.

My thesis also covers the possible solutions for the current challenges mentioned above. The practice of providing expanded registration information is encouraged in the Guideline A.5 of LTS guidelines, but the scope of "expanded registration information" is not clear yet. Like-minded states should start to develop the best practice compendium of "expanded registration" of non-functional space object in collaboration with UNOOSA. It is expected that such best practice would evolve into non-legally binding instruments, which would provide the first step to create international standards of cutting-edge space operations and utilization.