Some Observations on the proposed Space Assets Protocol

**Space Segment vs. Ground Segment**

1. Physical possession of satellites, which may occur in case of a default of payment, is not as simple as in case of aircraft or rolling stock. The control and in-orbit transfer of satellites is a complex operation.

2. For every dollar spent in space, many more dollars are spent in terms of ground infrastructure to track, maintain the spacecraft, and to control it and also by the users such as establishment of up linking / down linking facilities, VSATs etc. in case of telecommunication satellites and data reception and processing ground stations in case of earth observation satellites. The interest of those who have made these investments on the ground – and which may be much more than the investment in space – must not be ignored in favour of interest of the investor in the space segment.

**Space Protocol vs. UN Space Treaties**

3. Most countries believe that UN space treaties are the cornerstones of the international space law. Therefore, in the operative section of the proposed protocol, a clause should be inserted to ensure the supremacy of the space treaties over this protocol such as …… “… in case of any conflict, the provisions of the Space Treaties shall prevail….”
4. In case of transfer of ownership of a space asset to a financer, the state to which the financer belongs, must register the asset in accordance with the “Registration Convention”.

5. In case of occurrence of a liability after the transfer of the control of a space asset to the investor, which state is liable to pay the damages in accordance with the “Liability Convention”?  

**Domestic Laws vs. Space Protocol**

6. Relationship between the ground segment, which is a subject matter of the domestic laws, and the space segment, which is a subject matter of the proposed protocol, is a complicated matter, which needs to be addressed appropriately.

7. Transfer of control of a space asset in case of a default of payment may attract domestic export control regulations, which may be in conflict with the proposed protocol.

8. Most space assets carry high technology items and transfer of ownership may amount to Technology Transfer. The domestic Technology Transfer laws as applicable to high technology items – which may sometimes be dual use items – may be in conflict with the provisions of the protocol.

**National Interests**

9. For many nations, specially the developing countries, the satellites carry very vital services such as communication, national television, tele-medicine, tele-education etc. In case of default, the financer may take control and replace these services by more financially attractive options thus crippling the vital national interests. Safeguards against such possibilities should be incorporated into the proposed protocol.

10. Transfer of ownership of some satellites – say earth observations satellites – may lead to issues related to national security. This needs appropriate attention.

11. The orbital slots and frequency spectrum are granted to states according to well-accepted practices by ITU. In case of a default, when a financer takes control of the space asset, is it possible for him to make use of the space asset since the orbital slot and the frequency spectrum are the properties of the state to which the defaulter belongs.