

Law Issues and Public Awareness Related to Space Exploration (11)

Law Issues and Public Awareness Related to Space Exploration (2)

Author: Dr. Fabio Tronchetti

University of Mississippi, China, fabio.tronchetti@yahoo.com

DOMESTIC AUTHORIZATION AND SUPERVISION OF PRIVATE MEGA-CONSTELLATIONS OF SATELLITES: CHALLENGING INTERNATIONAL SPACE LAW?

Abstract

Ove the past few years one of the most notable developments in the space field has been the emergence of private entities willing to operate mega-constellations of satellite in low-Earth orbit. On one side, such constellations promise to bring substantial benefits to civil users, particularly to enable network and communication access to remote areas. On the other side, mega-satellites constellations pose significant challenges to the existing international regulatory framework applicable to space activities. Indeed, the deployment and utilization of large number of satellites largely clashes with the traditional understanding of fundamental space law principles and almost inevitably leads to forms of non-traditional interpretation of those principles. If one consider that mega-constellations of satellites will mostly be owned and operated by private entities, thus requiring States to put in place domestic regulatory framework to authorize and supervise them, it is easy to realize how this might eventually result in the fragmentation of national space legislation, the overall weakening of core space law principles and questionable level of safety and monitoring over the constellations activities. In the light of the above the purpose of the paper is threefold: first, to highlight the legal challenges that private mega-constellations of satellites pose to the regulatory framework applicable to space activities; second, to indicate what elements a national space law should contain to properly regulate the management and utilization of such constellations by private entities; third, to review the domestic space legislation of those countries likely to deal with private entities operating mega-constellations of satellites and to recommended changes to it.