56th IISL COLLOQUIUM ON THE LAW OF OUTER SPACE (E7) International Regulations of Space Communications: Current Issues (3)

Author: Prof. Setsuko Aoki Keio University, Japan

EFFICIENT AND EQUITABLE USE OF ORBIT BY SATELLITE SYSTEMS: "PAPER SATELLITE" ISSUE REVISITED

Abstract

The paper satellite problem has been widely shared since late 20th century. While it was assessed that efforts taken to address this issue mainly in the International Telecommunication Union (ITU) ameliorated the situation, the recent incidents and discussions in the ITU seem to indicate paper satellite challenge has to be revisited from a new standpoint. In 2009, the Radiocmmunication Bureau (RB) made a survey between the real occupancy of the geostationary orbit (GEO) and the record in the Master International Frequency Register (MIFR), which betrayed a surprising number of around 325 satellite networks not corresponding to any existing operating satellites. ITU efforts to identify the real use of a slot eventually succeeded in removing about 145 satellite networks, but uncertainties on numerous satellites systems remain. One type of on-orbit satellite operation transfer is that the use of an aging satellite into a certain slot for several weeks in order not to lose a spot granted for the exclusive use by the ITU. Thus, it is significant to precisely identify the meaning of "bringing into regular operation," and when the temporal suspension allowed- up to two years-actually started to more efficiently use the limited natural resources of GEO slot. At the same time, equitable use that concerns many factors has to be taken note of. One effort for that purpose is the amended Radio Rules (RR) at World Radio Conference in 2012 (WARC-12) (including 11.44B, 11.49 and 11.49.1). This article tries to find elements to strike a fine balance between efficiency and equitability in the use of a GEO slot, taking recent examples into consideration including Iranian Zohreh-1 and Zohreh-2 cases.