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English only

Committee on the Peaceful

Uses of Outer Space

Fifty-fifth session

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Examination of the Geostationary Orbit

Information paper submitted by the Czech Republic

The Czech delegation gave a technical paper at the last session of the Scientific and Technical Subcommittee on the Actual Situation in the Geostationary Orbit (GEO). A comparison of the nominal positions of radio space stations with actual positions of satellites has shown that a certain percentage of space networks had no spacecraft at those positions and thus was not able to operate at all. If the unused radio space stations were suspended or the relevant proposals deleted, the overcrowding in the GEO would be lessened to the benefit of all users of the GEO.

The study was restricted to space networks which enjoy international recognition and protection against harmful interference by being notified in the Master International Frequency Register. The time span of the absence of spacecraft from relevant orbital positions was between one and five years. An absence of one year may be caused by the sophisticated requirements of technology of geostationary satellites but an absence of three to five years raises questions of efficiency of use of the orbit even if all requirements of the ITU were met. Long absences are not restricted to a few specific administrations. It is rather a general effect concerning a fairly large percentage of users of the GEO. Moreover, changes in spacecraft population occur frequently. Every year some 20 to 30 new satellites are put into service while a similar number of satellites are taken out of service. It means that the absence of 13 to 15 per cent is a general well established fact but the correction of the situation in any individual orbital position would require an updating to a very recent date and, in some cases, could not be implemented without a voluntary cooperation of administrations owning satellites at the nominal positions in question.



Without going into technical details of the study which is accessible in A/AC.105/C.1/2012/CRP.25 (Scientific and Technical Subcommittee 2012) and at the website www.geostationary.cz in an updated version, it is proposed to the Committee to adopt the following call addressed to the users of the GEO:

“The Committee calls on users of the Geostationary Orbit to revise their space networks with a view to suspend or remove those networks from the Master International Frequency Register of the International Telecommunication Union which have not been used recently and might not be used in the immediate future.”

No obligatory measure is proposed, on the contrary, the call is addressed to all users of the orbit who are the highest authorities in keeping their space networks on the ITU Register. All users would benefit from mitigating the adverse effects of the overcrowding of the geostationary orbit.
