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United States of America Preliminary Views on WRC-07

WRC-07 Agenda Item 1.10 to review the regulatory procedures and associated technical criteria of Appendix 30B without any action on the allotments, the existing systems or the assignments in the List of Appendix 30B.

Issue:

Appendix 30B delineates allotments within portions of C-band and Ku-band for each country; each allotment provides for national coverage under specific technical conditions (e.g., maximum power densities and minimum antenna sizes). While this plan was intended to preserve the opportunity for all countries to obtain real benefits from use of satellite systems in the geostationary satellite orbit (GSO), the actual number of systems put into operation pursuant to this appendix since its original adoption in 1988 has been quite limited.

Some aspects of the regulatory procedures and technical criteria are outdated and serve to restrict, rather than foster, the development of real, economical systems.

Background

Since the adoption, in 1988, of Appendix 30B, satellite technologies have advanced dramatically. And at the same time, many countries have recognized that satellites offer great potential to facilitate access to digital broadband services such as the Internet, thereby leaping past antiquated technologies. Yet, only slight changes have been made to Appendix 30B, rendering it still poorly-suited to satisfy these new technology requirements. WRC-03 has only just begun to address the issue. For example, full account has yet to be taken of the widespread use of digital modulation techniques that facilitate high capacity at substantially lower interference margins than envisaged when the appendix was originally adopted.

WRC-03 made two notable changes to the appendix that involve the technical criteria for analyses carried out from 5 July 2003: 1) the interference criteria for aggregate and single entry C/I thresholds were relaxed by 3 dB, and 2) an improved earth station offaxis gain pattern was decided to be applied for cases requiring the additional discrimination to resolve interference issues. Based on these decisions, and the instructions of Resolution 146, the BR has prepared a new reference plan reflecting these changes.

WRC-03 also recognized that additional changes to the regulatory procedures and associated technical criteria of Appendix 30B may be productive and thus put this item on the agenda for WRC-07. The CPM referred this topic to WP-4A and the Special Committee (SC) for study. At its April 2004 meeting, WP-4A, as the lead group for this item, considered several contributions, including one from the USA, related to this topic. WP-4A prepared a summary of the specific issues to be studied for which contributions to its next meeting in October are encouraged.

U.S. Views

- 1. The U.S. does not advocate any action on the allotments, the existing systems or the assignments in the List of Appendix 30B.
- 2. The U.S. supports continued improvements to the regulatory procedures and associated technical criteria of Appendix 30B and is committed to working through the study groups and with other administrations toward that end.
- 3. The U.S. considers that future technical criteria should be based on realistic parameters that reflect digital communications technology in use today and foreseen for the near future.
- 4. The U.S. considers that sufficient flexibility should be built in to the regulatory procedures to permit reasonable accommodation of new technologies without requiring additional revisions to Appendix 30B post WRC-07.
- 5. The U.S. intends to focus its efforts on improvements to the regulatory procedures and associated technical criteria for the Ku-band portion of Appendix 30B, as it considers this offers the greatest opportunity for improvements that can yield cost-effective access to satellite broadband services.
- 6. The U.S. considers that the bands subject to Appendix 30B should be among those considered for the global broadband satellite systems serving Internet applications addressed under agenda item 1.19