WRC-2003 Advisory Committee

IWG-7

DRAFT PRELIMINARY VIEWS ON WRC-03

WRC-2003 Agenda Item 1.30[b]: to consider possible changes to the procedures for the advance publication, coordination and notification of satellite networks in response to Resolution 86 (Minneapolis, 1998)

ISSUE [b]: Coordination-Arc Approach - Potential modifications to Articles S9 and S11 of the Radio Regulations (RR) and associated appendices to the RR (e.g., Appendix S4) with respect to the coordination-arc approach.

BACKGROUND: Resolution 86 (Minneapolis, 1998) resolves to request WRC-2000 and subsequent WRCs to continually review and update the advance publication, coordination and notification procedures, including the associated technical characteristics, and the related Appendices of the Radio Regulations, so as to ensure that they reflect the latest technologies, as well as to achieve additional simplification and cost savings for the Radiocommunication Bureau and administrations.

WRC-2000 implemented a coordination-arc approach to replace the Appendix S8 ($\Delta T/T$) coordination threshold, in certain frequency bands, in determining which administrations and networks are affected by a network entering the coordination phase. The coordination-arc approach affects the 6/4, 14/11, and 30/20 GHz "commercial" satellite bands. The determination of the need for coordination between GSO FSS networks is based on coordination arcs of ±10 degrees, in the bands 3 400-4 200 MHz, 5 725-5 850 MHz (Region 1) and 5 850-6 725 MHz, ±9 degrees in the bands 10.95-11.2 GHz, 11.45-11.7 GHz, 11.7-12.2 GHz (Region 2), 12.2-12.5 GHz (Region 3), 12.5-12.75 GHz (Regions 1 and 3), 12.7-12.75 GHz (Region 2), and 13.75-14.5 GHz, and ±8 degrees in the bands 17.7-20.2 GHz and 27.5-30.0 GHz about the nominal orbital positions of those networks. An administration may request that a co-frequency GSO FSS satellite network outside the coordination arc be included in coordination when the administration can demonstrate by analysis that the increase in the system noise due to the proposed network ($\Delta T/T$) exceeds 6%. A co-frequency GSO FSS satellite network within the coordination are may also be excluded from the coordination when the increase in system noise to the network is less than 6%. Although it is unlikely that WRC-2003 will see an expansion of the coordination-arc concept to FSS other bands without agreement on the arcs within Study Group (SG) 4, there may be proposals to expand the arc concept to other bands.

PRELIMINARY VIEW: The coordination-arc approach should be limited to the frequency bands identified by WRC-2000 unless SG4 comes to an agreement on additional specific FSS bands where the arc concept is warranted, and develops appropriate coordination arcs for these bands. The effectiveness of the coordination arc approach in improving satellite network coordination procedures should be demonstrated before expanding the concept to other bands.
