

**UNITED STATES OF AMERICA**  
**DRAFT PRELIMINARY VIEWS FOR WRC-15**

**Agenda Item 9.1.2:** Studies on possible reduction of the coordination arc and technical criteria used in application of **No. 9.41** in respect of coordination under **No. 9.7** as per Resolution **756 (WRC-12)**<sup>1</sup>

**BACKGROUND:** In Resolution **756 (WRC-12)** it was recognized that the coordination arc to be used to identify coordination requirements in the 6/4 GHz and 14/10/11/12 GHz frequency bands had been reduced and that “further reductions in the coordination arc in these bands may be warranted”.

Accordingly *resolves 2* of Resolution **756 (WRC-12)** invites the ITU-R “to study whether additional reductions in the coordination arcs in RR Appendix **5 (Rev.WRC-12)** are appropriate for the 6/4 GHz and 14/10/11/12 GHz frequency bands, and whether it is appropriate to reduce the coordination arc in the 30/20 GHz band”.

With respect to the 6/4 GHz and 14/10/11/12 GHz frequency bands, it is noted that at WRC-12 a number of administrations proposed that the coordination arc applicable to FSS geostationary satellite networks in certain congested portions of the 4/6 GHz and 10/11/12/14 GHz frequency bands be reduced from 10° to 6° in 4/6 GHz and from 9° to 5° in 10/11/12/14 GHz. These reductions received broad support from countries from all the three ITU Regions.

The grounds for such proposal can be found in the extensive studies on the subject conducted by Working Party 4A prior to WRC-12. Such studies were fully described in the associated proposals to WRC-12, and virtually all of the proposals shared a rationale similar to that included in Addendum 36 to WRC-12 Document 9 submitted by the United States. In particular, it is noted in Addendum 36 to WRC-12 Document 9 that:

*“In certain portions of the 6/4 GHz band<sup>2</sup> as well as of the 10/11/12/14 GHz band<sup>3</sup>, a new GSO FSS satellite network is likely required to effect coordination with a large number of other*

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<sup>1</sup> This matter has been included in the Outline of the draft CPM Report to WRC-15 and is addressed in the Allocation of ITU-R preparatory work for WRC-15. See Administrative Circular (CA/201), Results of the first session of the Conference Preparatory Meeting for WRC-15 (CPM15-1), at Annexes 7 and 8, and Addendum 1 to CA/201.

<sup>2</sup> 3 400-4 200 MHz (space-to-Earth), 5 725-5 850 MHz (Earth-to-space) in Region 1, 5 850-6 725 MHz (Earth-to-space), 7 025-7 075 MHz (space-to-Earth) and (Earth-to-space).

*satellite networks with orbital separations in the range of 2° to 4° or even with less than 2° separation. The need to co-exist and ensure appropriate protection to all these satellite networks implies that coexistence with and protection of satellite networks with larger separation angles will automatically result and coordination with such networks is actually unnecessary.*

*One of the consequences of this situation is that many of the coordinations triggered by the current coordination arcs of 10° (6/4 GHz) and 9° (10/11/12/14 GHz) are never conducted because neither of the parties involved feels an actual need for it to be done. The burden of having to conduct coordination with satellite networks which are closer to the incoming network is already heavy enough to discourage operators and administrations to devote scarce resources to conduct coordination exercises that are clearly unnecessary.”*

Although agreeing to a reduction of the coordination arc, WRC-12 did not go as far as proposed by the United States, or other administrations. Instead, WRC-12 approved a reduction from 10° to 8° in 4/6 GHz and from 9° to 7° in 10/11/12/14 GHz.

The points raised in the proposals to WRC-12 for a larger reduction will be even more valid in 2015 than they were in 2012 because congestion in the frequency ranges under consideration continues to grow.

**U.S. VIEW:** It is the view of the United States that the coordination arc applicable to FSS geostationary satellite networks in certain congested portions of the 4/6 GHz and 10/11/12/14 GHz frequency bands be reduced from 8° to 6° in 4/6 GHz and from 7° to 5° in 10/11/12/14 GHz.

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<sup>3</sup> 10.95-11.2 GHz (space-to-Earth), 11.45-11.7 GHz (space-to-Earth), 11.7-12.2 GHz (space-to-Earth) in Region 2, 12.2-12.5 GHz (space-to-Earth) in Region 3, 12.5-12.75 GHz (space-to-Earth) in Regions 1 and 3, 12.7-12.75 GHz (Earth-to-space) in Region 2, and 13.75-14.5 GHz (Earth-to-space).