

18 April 2005

Source: 8B/Temp/66

To the members of the Radar Correspondence Group:

Working Party 7C has sent a liaison statement to Working Party 8B (Document 8B/129), “WRC-07 Agenda item 1.3, Resolution 747 (WRC-03): Possible extension of the existing primary allocations to the earth exploration-satellite service (active) and the space research service (active) in the band 9 500-9 800 MHz.”

This is a lengthy document, which requests detailed responses from WP 8B on a number of highly technical issues. Therefore WP 8B has requested that the matter of gathering information for a response to WP 7C should be handled through the Radar Correspondence Group (RCG) between April 2005 and the beginning of the September 2005 meeting of WP 8B. At that meeting of WP 8B, those inputs will be used to formulate a WP 8B response to WP 7C. (The WP 7C meeting will occur in November, following the WP 8B meeting.)

The members of the RCG are requested to provide responses to the following topics on which WP 7C has requested information:

- 1) In compatibility studies conducted by Working Party 7C related to EESS (active) and SRS (active) sharing with radiodetermination radars operating in the band 9-10 GHz, WP 7C will take into consideration all of the relevant radar characteristics contained in a preliminary draft new Recommendation (PDNR) available in Working Party 8B Document 8B/36, Annex 3, and in Working Party 8B Document 8B/98, Annex 2. WP 7C requests that WP 8B identify the specific systems to use in compatibility studies and provide the corresponding antenna gain patterns and antenna dynamic scanning characteristics (both electronic and mechanical)¹;
- 2) WP 7C would like to take into consideration in the compatibility analysis that the bandwidth of the SARs, which are on the order of 400 MHz (SAR2 and SAR3) or more, may affect multiple channels of the radar systems. WP 7C requests information from WP 8B on the channels used by the radar systems listed in Working Party 8B Document 8B/36, Annex 3; and guidance on how to perform compatibility analyses for radar systems operating on multiple channels;
- 3) The Document 8B/129 Annexes 1-3 are largely the same as those contained in Document 8B/3 in March 2004 but there have been a number of revisions to these Annexes based on the change of radar parameters for SAR3. Annexes 4 and 5 are new and contain the two interference assessments. It should be noted

¹ Editor's Note: The text regarding antenna scanning was deemed necessary by WP 8B as an addition to the original text drawn from Document 8B/129, which only referred to antenna gain patterns.

that the results found in Annexes 1-5 should be considered preliminary. WP 7C invites WP 8B to review the results found therein;

- 4) As shown in the analyses presented in Document 8B/129, Annexes 4 and 5, compatibility between EESS (active) and radiodetermination services in the band 9 300-9 500 MHz cannot be determined without consideration of various radar interference mitigation factors for which WP 7C does not have the information nor the expertise. WP 7C requests WP 8B to use the analyses given in these Annexes along with the appropriate radar interference mitigation factors to evaluate this information².

In addition to the four topics above on which WP 7C has requested information, WP 8B believes that two additional and pertinent topics, based on *resolves 2* and *resolves 3* of Resolution 747 (WRC-03) are required to be addressed. Information relating to these topics for use in a liaison statement responding to WP 7C in relation to Document 8B/129 is hereby requested:

- 5) Technical characteristics, protection criteria, and other factors of radiolocation, radionavigation, EESS (active) and space research (active) systems that ensure compatible operations in the band 9 300-9 500 MHz;
- 6) Methodology for assessing the compatibility between terrestrial radars of the radiolocation and radionavigation services, and space-borne radars of the Earth exploration-satellite and space research services in the band 9 300-9 500 MHz.

As inputs are received between April and September 2005 from the members of the RCG on the six topics listed above, the Chairman of the RCG will collate these materials and prepare them for use in the timely preparation of a liaison response from WP 8B to WP 7C during the September 2005 meeting of WP 8B.

For further information please contact:

Mr. Frank Sanders (USA), RCG Chair
Tel: +1 303 4977600
Fax: +1 303 4973680
E-mail: fsanders@its.bldrdoc.gov

² Editor's Note: WP 8B interprets this text as a request by WP 7C for information on mitigation techniques to be used in WP 7C analyses.