

Mr. John Giusti
Chief of the International Bureau
Federal Communications Commission
445 12th Street SW
Washington, D.C. 20554

Dear Mr. Giusti:

The National Telecommunications and Information Administration (NTIA), on behalf of the Executive Branch Agencies, has approved the release of an additional draft Executive Branch proposal for WRC-07. This proposal considers the federal agency inputs toward the development of U.S. Proposals for WRC-07.

The enclosed document contains a draft proposal, which addresses Agenda Item 1.7 is forwarded for your consideration and review by your WRC-07 Advisory Committee. Jim Vorhies of my staff is the primary contact for NTIA.

Sincerely,

(Original Signed September 27, 2006)
Fredrick R. Wentland
Associate Administrator
Office of Spectrum Management

Enclosure

United States of America

PROPOSAL FOR THE WORK OF THE CONFERENCE

Agenda Item 1.7: to consider the results of ITU-R studies regarding sharing between the mobile-satellite service and the space research service (passive) in the band 1 668 - 1 668.4 MHz, and between the mobile-satellite service and the mobile service in the band 1 668.4 - 1 675 MHz in accordance with Resolution **744 (WRC-03)**;

Background Information: (Issue A) The band 1 668-1 668.4 MHz is allocated to the space research (passive) service (SRS (passive)) and the mobile-satellite service (MSS) (Earth-to-space). The space research allocation may be used by space-based radio astronomy applications, as part of Space Very Long Baseline Interferometry systems (S-VLBI). The band 1 668-1 668.4 MHz is a part of the band, 1 660.5-1 668.4 MHz, allocated to the SRS (passive). However S-VLBI spaceborne receivers typically receive over a wider frequency band because a wider band is desirable for increasing the sensitivity of systems and also to observe highly red-shifted objects.

The potential for interference from mobile earth stations (MES) operating in the MSS to the S-VLBI systems has been studied by the ITU-R, in accordance with Resolution **744**. The studies concluded that to ensure protection of future SRS (passive) systems operating in highly elliptical orbits, with an apogee of 150 000 km and higher, the power density of MESs operating in the GSO MSS networks should not exceed to – 12.5 dBW/4 kHz in any part of the frequency band 1 668-1 668.4 MHz.

(Issue B) The band 1 668.4-1 675 MHz is allocated to the MSS in the Earth-to-space direction. There are two potential interference scenarios: 1) interference from transmitting stations in the mobile service to receiving space stations in the mobile satellite service; and 2) interference from transmitting mobile earth stations to receiving mobile stations. Regulatory provisions relating to scenario 2 were dealt with at WRC-03 by the inclusion of a coordination mechanism and appropriate parameters in Appendix **7** of the Radio Regulations. However, there are currently no regulatory provisions which address potential interference from systems in the mobile service to MSS systems in the band 1 668.4-1 675 MHz. Therefore, the ITU sharing studies have been focused on scenario 1. No proposals are included herein concerning this issue.

Proposal:

USA/ /1 ADD

5.379[F] In order to protect the space research service (passive) in the band 1 668-1 668.4 MHz the maximum emission power density of any mobile earth station in a mobile-satellite service network in the geostationary satellite orbit network operating in this band, shall not exceed -12.5 dBW/4 kHz in any part of the frequency band 1 668-1 668.4 MHz.

Reasons: To ensure the protection of and future S-VLBI systems operating in the SRS (passive).

USA/ 2 MOD

5.379D For sharing of the band 1 668-1 675 MHz between the mobile-satellite service and the fixed, and mobile and space research (passive) services, Resolution **744 (WRC-03)** shall apply. (WRC-03)

Reasons: Studies under Res. **744** have concluded with regard to the SRS (passive).

USA/ 3 MOD

RESOLUTION 744 (WRC-0307)

Sharing between the mobile-satellite service (Earth-to-space) ~~and the space research (passive) service in the band 1 668-1 668.4 MHz and between and the space research (passive) service in the band 1 668-1 668.4 MHz and between the mobile-satellite service (Earth-to-space) and the fixed and mobile services in the band 1 668.4-1 675 MHz~~

The World Radiocommunication Conference (Geneva, 2007~~2003~~),

Considering

- a) that WRC-03 ~~this conference~~ made a global allocation to the mobile-satellite service (MSS) (Earth-to-space) in the band 1 668-1 675 MHz and a global allocation to the MSS (space-to-Earth) in the band 1 518-1 525 MHz;
- b) that due to sharing conditions between MSS (space-to-Earth) and the aeronautical mobile service for telemetry in the band 1 518-1 525 MHz (see No. **5.348B**), MSS operation in the United States of America is unlikely to be feasible;
- c) that the above constraints on the MSS in the band 1 518-1 525 MHz therefore limit the possible use of the band 1 668-1 675 MHz by the MSS in the United States of America;
- d) that the band 1 660.5-1 668.4 MHz is allocated to the space research (passive) service;
- ~~e) that in the band 1 668-1 68.4 MHz, mobile earth stations and space research (passive) stations are subject to coordination under No. **9.11A**;~~
- fe) that the band 1 670-1 675 MHz is currently planned for use in the United States of America for the fixed and mobile services,

considering further

- a) that the band 1 668.4-1 675 MHz is allocated to the fixed and mobile services;
- b) that No. **5.380** identifies the band 1 670-1 675 MHz for aeronautical public correspondence systems but that no such systems exist;

resolves

that, in the band 1 670-1 675 MHz, stations in the MSS shall not claim protection from fixed and mobile stations operating within the United States of America,

Reasons: Studies called for in this resolution have been completed.
