

UNITED STATES OF AMERICA
DRAFT PROPOSAL FOR WRC-19

Agenda Item 1.15: To consider identification of frequency bands for use by administrations for the land-mobile and fixed services applications operating in the frequency range 275-450 GHz, in accordance with Resolution 767 (WRC-15);

Background Information: RR No. **5.565** identifies frequency bands in the range 275-450 GHz for use by administrations for radio astronomy, Earth exploration-satellite (passive) and space research (passive) service applications. WRC-19 agenda item 1.15 seeks to identify spectrum for land mobile service (LMS) and fixed service (FS) applications in the 275-450 GHz band while maintaining protection of the existing Earth exploration-satellite service (EESS) (passive) and radio astronomy (RAS) applications identified in RR No. **5.565**.

The studies concerning the compatibility of EESS(passive)/RAS and LMS and FS applications concluded that the following bands can be identified for LMS/FS applications without the need for regulatory restrictions: 275-296 GHz, 306-313 GHz, 320-330 GHz and 356-450GHz. However, in the case where LMS/FS applications will be deployed in the same geographical area as RAS sites, separation distances and/or avoidance angles may be needed (per national arrangements) to protect RAS sites.

Proposal: This document proposes modifications as shown:

ARTICLE 5

Frequency allocations

MOD **USA/4586A15/1**

Section IV – Table of Frequency Allocations
(See No. **2.1**)

Allocation to services		
Region 1	Region 2	Region 3
275-3 000	(Not allocated) 5.565 <u>ADD 5.A115</u>	

Reasons: Frequency bands where land-mobile and fixed service applications are considered as potentially compatible with both EESS (passive) and RAS can be identified by a new footnote.

NOC **USA/4586A15/2**

5.565

Reasons: Modifications to No. **5.565** are not necessary as the addition of fixed and land-mobile active services to the 275-450 GHz frequency range can be accomplished through the addition of a new footnote.

ADD **USA/4586A15/3**

5.A115 The following frequency ranges are identified for use by administrations for land-mobile and fixed service applications:

– 275-296 GHz, 306-313 GHz, 320-330 GHz and 356-450 GHz

Administrations wishing to make the above frequencies available for land-mobile and fixed service applications are urged to take all practicable steps to protect the frequency bands identified for passive services as provided in No. **5.565**.

Reasons: Studies that evaluated the entire 275-450 GHz range show sharing is possible between FS/LMS applications and the EESS (passive)/RAS in the 275-296 GHz, 306-313 GHz, 320-330 GHz and 356-450GHz frequency bands. Note that for frequencies in the range 275-450 GHz not identified for sharing, studies have shown that FS/LMS applications could cause harmful interference to existing passive applications making use of frequency bands identified in No. **5.565**.

SUP **USA/4586A15/4**

RESOLUTION 767 (WRC-15)

Studies towards an identification for use by administrations for land-mobile and fixed services applications operating in the frequency range 275-450 GHz

The World Radiocommunication Conference (Geneva, 2015),

Reasons: Studies have been completed and frequency bands for FS/LMS applications have been identified.
