

UNITED STATES OF AMERICA

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

**Agenda Item 1.12:** *to consider an extension of the current worldwide allocation to the Earth exploration-satellite (active) service in the frequency band 9 300 – 9 900 MHz by up to 600 MHz within the frequency bands 8 700 – 9 300 MHz and/or 9 900 – 10 500 MHz, in accordance with Resolution 651 (WRC-12)*

**Background Information:** This agenda item considers extending the current Earth exploration-satellite service (EESS) (active) allocation in the range 9 300 – 9 900 MHz by an additional 600 MHz within portions of the range 8 700 – 10 500 MHz.

Incumbent services in the 9 900 – 10 500 MHz range include the radiolocation, fixed, mobile, amateur, and amateur-satellite services. The radiolocation service is primary worldwide throughout the band. The fixed service is secondary worldwide from 9 900 – 10 000 MHz. The fixed and mobile services are primary in ITU Regions 1 and 3 from 10 000 – 10 450 MHz. The amateur service is secondary at 10 000 – 10 500 MHz worldwide, and the amateur-satellite service is secondary at 10 450 – 10 500 MHz worldwide.

Currently, the 9 000 – 9 300 MHz range contains primary allocations to aeronautical and maritime radionavigation safety services. It is imperative to protect these safety service operations from harmful interference. There is potential interference to stations operating in the adjacent 10.5 – 10.7 GHz frequency range if the extension is made in the upper 9 900 – 10 500 MHz range, including stations in passive services (radio astronomy, Earth exploration-satellite (passive), and space research (passive)). Similarly, there is potential interference to stations operating in the space research service in the band 8 400 – 8 500 MHz if the EESS allocation is extended to the lower 8 700 – 9 300 MHz frequency range.

In accordance with Resolution 651 (WRC-12), the ITU conducted sharing studies to ensure the protection of existing in-band services and compatibility studies to address interference due to unwanted emissions into the services in the 10 600 – 10 700 MHz frequency range and the space research service in the 8 400 – 8 500 MHz band.

Studies have demonstrated that sharing is possible under certain conditions between EESS (active) and the existing services in the 9 900 – 10 500 MHz frequency range and that passive services in the 10 600 – 10 700 MHz frequency range can be protected from unwanted emissions from a new EESS (active) allocation. Given the results of sharing studies, this proposal supports an allocation of an additional 600 MHz to the EESS (active) as a primary-secondary allocation in the frequency range 9 900 – 10 500 MHz. This proposal extends the protections for incumbent services-the radiolocation service in No. 5.476A to the new frequency allocations by virtue of the secondary status of the EESS allocation. The proposal and indicates that the use of this frequency allocation extension may-shall be limited to systems requiring a necessary bandwidth of 1 200 MHz that cannot be fully accommodated within the 9 300 – 9 900 MHz band, pending the results of ITU-R studies.-. This proposal supports no change to allocations in the 8 700 – 9 300 MHz frequency range because ITU-R studies show feasibility to make the entire 600 MHz

~~extension to the EESS (active) in frequencies above the existing EESS (active) allocation 9 300–9 900 MHz.~~

As part of the consideration of this Agenda Item and the potential allocation to the EESS (active) service in the 10 000 - 10450 MHz band, the United States requests to be added to International Footnote 5.480 to avoid prematurely foreclosing full consideration of the use of this band for fixed (and mobile) services in the 10.000 - 10.450 MHz band. By joining this footnote, the United States would join fifteen other countries within Region 2 who allocate fixed (and mobile) service(s) in this band.

**Proposal:**

**ARTICLE 5**

**Frequency allocations**

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

**MOD** USA/AI 1.12/1

**9 500-10 000 MHz**

Allocation to services		
Region 1	Region 2	Region 3
<b>9 500-9 800</b>	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active) 5.476A	
<b>9 800-9 900</b>	RADIOLOCATION Earth exploration-satellite (active) Fixed Space research (active) 5.477 5.478 5.478A 5.478B	
<b>9 900-10 000</b>	<del>EARTH EXPLORATION-SATELLITE (active) ADD 5A.112</del> RADIOLOCATION <del>Earth Exploration-Satellite (active) ADD 5A.112</del> Fixed 5.477 5.478 5.479 <del>ADD 5.B112</del>	

**Reasons:** Studies have shown that sharing between the EESS (active) and other services in the frequency range of 9 900 – 10 500 MHz is feasible.

MOD USA/AI 1.12/2

**10-10.5 GHz**

Allocation to services		
Region 1	Region 2	Region 3
<p><b>10-10.45</b> <del>EARTH EXPLORATION-SATELLITE (active) ADD 5.A112</del> FIXED MOBILE RADIOLOCATION Amateur <del>Earth Exploration-Satellite (active) ADD 5.A112</del> 5.479-<del>ADD 5.B112</del></p>	<p><b>10-10.45</b> <del>EARTH EXPLORATION-SATELLITE (active) ADD 5.A112</del> RADIOLOCATION Amateur <del>Earth Exploration-Satellite (active) ADD 5.A112</del> 5.479 5.480-<del>ADD 5.B112</del></p>	<p><b>10-10.45</b> <del>EARTH EXPLORATION-SATELLITE (active) ADD 5.A112</del> FIXED MOBILE RADIOLOCATION Amateur <del>Earth Exploration-Satellite (active) ADD 5.A112</del> 5.479-<del>ADD 5.B112</del></p>
<p><b>10.45-10.5</b></p>	<p><del>EARTH EXPLORATION-SATELLITE (active) ADD 5.A112</del> RADIOLOCATION Amateur Amateur-satellite <del>Earth Exploration-Satellite ADD 5.A112</del> 5.481-<del>ADD 5.B112</del></p>	

**Reasons:** Studies have shown that sharing between the EESS (active) and other services in the frequency range of 9 900 – 10 500 MHz is feasible.

ADD USA/AI 1.12/3

**5.A112** The use of the frequency range 9 900 – 10 500 MHz by the Earth exploration-satellite service (active) is limited to systems requiring necessary bandwidths ~~{of 1-200 MHz.}~~ ~~greater than 600 MHz~~ that cannot be fully accommodated within the 9 300-9 900 MHz band. ~~(WRC-WRC-15)~~

**Reasons:** To limit the use of the extension to the existing allocation to systems employing very wide bandwidths in order to protect incumbent services.

~~ADD USA/AI 1.12/4~~

~~**5.B112** In the bands 9 900 – 10 000 MHz, 10 – 10.45 GHz, and 10.45 – 10.5 GHz stations in the Earth exploration-satellite service (active) shall not cause harmful interference to, nor claim protection from, stations of the radiolocation service. (WRC-15)~~

~~Reasons: To extend the same protections to the radiolocation service for the new allocation to the Earth exploration satellite service (active) in the bands 9 900—10 000 MHz, 10—10.45 GHz, and 10.45—10.5 GHz as in the 9 300—9 800 MHz band.~~

5.480 Additional allocation: in Argentina, Brazil, Chile, Costa Rica, Cuba, El Salvador, Ecuador, Guatemala, Honduras, Mexico, Paraguay, the Netherlands Antilles, Peru and Uruguay, the band 10-10.45 GHz is also allocated to the fixed and mobile services on a primary basis. In Venezuela and the United States, the band 10-10.45 GHz is also allocated to the fixed service on a primary basis. (WRC-15)

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Reasons: To provide greater flexibility in the future in the United States to deploy fixed services in this band consistent with fifteen other countries in Region 2.

**NOC** USA/AI 1.12/5

### 8 650-9 300 MHz

Allocation to services		
Region 1	Region 2	Region 3
8 650-8 750	RADIOLOCATION 5.468 5.469	
8 750-8 850	RADIOLOCATION AERONAUTICAL RADIONAVIGATION 5.470 5.471	
8 850-9 000	RADIOLOCATION MARITIME RADIONAVIGATION 5.472 5.473	
9 000-9 200	RADIOLOCATION AERONAUTICAL RADIONAVIGATION 5.337 5.471 5.473A	
9 200-9 300	RADIOLOCATION MARITIME RADIONAVIGATION 5.472 5.473 5.474	

**Reasons:** Because it has been shown to be feasible to allocate the entire 600 MHz extension to the EESS (active) in frequencies above the existing EESS (active) allocation at 9 300 – 9 900 MHz, no change to allocations in the 8 700 – 9 300 MHz frequency range is needed.

**SUP** USA/AI 1.12/6

RESOLUTION 651 (WRC-12)

Document IWG-3/041 (13.01.14)  
Redlined from WAC/059(27.01.14)

**Possible extension of the current worldwide allocation to the Earth exploration-satellite (active) service in the frequency band 9 300-9 900 MHz by up to 600 MHz within the frequency bands 8 700-9 300 MHz and/or 9 900-10 500 MHz**

**Reasons:** The required studies have been completed and this resolution is no longer needed.