UNITED STATES DEPARTMENT OF COMMERCE
National Telecommunications and
Information Administration
INTERDEPARTMENT RADIO ADVISORY COMMITTEE
Washington, D.C. 20230

DEC 13 2013

Ms. Mindel De La Torre
Chief of the International Bureau
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Ms. De La Torre:

The National Telecommunications and Information Administration (NTIA) on behalf of the Executive Branch agencies, approves the release of the draft Executive Branch proposal for WRC-15 agenda item 1.12. NTIA proposes a modification to the table of allocations to include additional Earth exploration-satellite service allocations.

NTIA considered the federal agencies' input toward the development of U.S. proposals for WRC-15. NTIA forwards this package for your consideration and review by your WRC-15 Advisory Committee. Dr. Darlene Drazenovich is the primary contact from my staff.

Sincerely,

Karl B. Nebbia
Associate Administrator
Office of Spectrum Management

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 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 allocation in the frequency range 9 900 – 10 500 MHz. This proposal extends the protections for incumbent services in No. **5.476A** to the new frequency allocations and indicates that the use of this frequency allocation extension may 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.

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**
9 500-9 800	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active) 5.476A	
9 800-9 900	RADIOLOCATION Earth exploration-satellite (active) Fixed Space research (active) 5.477 5.478 5.478A 5.478B	
9 900-10 000	EARTH EXPLORATION-SATELLITE (active) ADD 5A.112 RADIOLOCATION Fixed 5.477 5.478 5.479 ADD 5.B112	

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**
10-10.45 EARTH EXPLORATION-SATELLITE (active) ADD 5.A112 FIXED MOBILE RADIOLOCATION Amateur 5.479 ADD 5.B112	**10-10.45** EARTH EXPLORATION-SATELLITE (active) ADD 5.A112 RADIOLOCATION Amateur 5.479 5.480 ADD 5.B112	**10-10.45** EARTH EXPLORATION-SATELLITE (active) ADD 5.A112 FIXED MOBILE RADIOLOCATION Amateur 5.479 ADD 5.B112
10.45-10.5	EARTH EXPLORATION-SATELLITE (active) ADD 5.A112 RADIOLOCATION Amateur Amateur-satellite 5.481 ADD 5.B112	

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 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.

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)

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.