

ATTACHMENT B
to FCC Public Notice DA 14-1248

Draft Proposals formulated and approved within the National Telecommunications and Information Administration:

WAC/076(27.08.14)

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 1.1 and 1.4. NTIA proposes no change to the band 3700-4200 MHz and no change to 6425 MHz and above on agenda item 1.1. NTIA also proposes no change to band 5250-5450 kHz on agenda item 1.4.

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. Mr. Scott Kotler is the primary contact from my staff.

Sincerely,

(Original Signed February 21, 2014)

Karl B. Nebbia
Associate Administrator
Office of Spectrum Management

UNITED STATES OF AMERICA
DRAFT PROPOSAL FOR THE WORK OF THE CONFERENCE

Agenda Item 1.1: *to consider additional spectrum allocations to the mobile service on a primary basis and identification of additional frequency bands for International Mobile Telecommunications (IMT) and related regulatory provisions, to facilitate the development of terrestrial mobile broadband applications, in accordance with Resolution 233 (WRC-12)*

Background Information: WRC-15 will consider additional allocations to the mobile service (MS) on a primary basis and identification of additional frequency bands for IMT based on the results of ITU-R sharing and compatibility studies.

Proposals have been introduced in the JTG 4-5-6-7 supporting identification of the 3 700 – 4 200 MHz frequency band for IMT. The band has been identified as a “suitable frequency range” for purposes of initiating inter-service compatibility and sharing studies to be conducted by Joint Task Group 4-5-6-7 under 2015 World Radiocommunication Conference (WRC-15) Agenda Item 1.1.

The 3 600 – 4 200 MHz band is allocated to the fixed-satellite service (FSS) (space-to-Earth) and fixed service on a co-primary basis in Region 1, with a secondary mobile service allocation. In addition, the 3 700 – 4 200 MHz band is allocated on a co-primary basis to FSS (space-to-Earth), fixed and mobile (except aeronautical mobile) services in both Regions 2 and 3.

As detailed in Report ITU-R M.2109 (2007), previous compatibility studies, carried out prior to WRC-07, have determined that IMT and IMT-Advanced services operating in 3 700 – 4 200 MHz would not be compatible with existing FSS operations in the band.¹ This band is employed by major C-band satellite services that provide important international communications capabilities in most regions of the world. To date, no studies indicate the possibility of compatibility between IMT services and these important satellite uses. Therefore, the United States proposes no change to RR Article 5 Table of Frequency Allocations for the band 3 700 – 4 200 MHz.

¹ See Report ITU-R M.2109, *Sharing studies between IMT-Advanced systems and geostationary satellite networks in the fixed-satellite service in the 3 400-4 200 and 4 500-4 800 MHz frequency bands* (2007)

Proposal:

ARTICLE 5

Frequency allocations

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

NOC

USA/1.1/X

2 700-4 800 MHz

| Allocation to services | | |
|--|--|-----------------|
| Region 1 | Region 2 | Region 3 |
| ... | | |
| 3 600-4 200 FIXED FIXED-SATELLITE (space-to-Earth) Mobile | ... | ... |
| | 3 700-4 200 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile | |
| ... | | |

Reason: Any modifications to the 3 700 – 4 200 MHz band may place unacceptable constraints on the fixed-satellite service operations in the band.

UNITED STATES OF AMERICA

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda item 1.1: *to consider additional spectrum allocations to the mobile service on a primary basis and identification of additional frequency bands for International Mobile Telecommunications (IMT) and related regulatory provisions, to facilitate the development of terrestrial mobile broadband applications, in accordance with Resolution 233 (WRC-12);*

Background Information: Conference Preparatory Meeting (CPM) 15-1 established a dedicated Joint Task Group (JTG 4-5-6-7) to address issues related to WRC-15 Agenda items 1.1 and 1.2. JTG 4-5-6-7 is responsible for developing draft CPM text and performing associated studies in accordance with the provisions of Resolution 233 (WRC-12) regarding Agenda item 1.1. As part of its terms of reference, JTG 4-5-6-7 is to consider the results of studies from Working Party 5D on spectrum requirements for the mobile service, including suitable frequency ranges for IMT, from which JTG 4-5-6-7 is to conduct sharing studies for purposes of developing CPM text. In Document 4-5-6-7/220, “Final input to Joint Task Group 4-5-6-7 on suitable frequency ranges WRC-15 Agenda item 1.1”, WP5D has confirmed and provided to JTG4-5-6-7 its final input on suitable frequency ranges for IMT, which in their sum bounds the frequency range 410 MHz to 6 425 MHz as being suitable.

Over several meetings, WP5D discussed the suitability of frequencies above 6 425 MHz for IMT for consideration under WRC-15 Agenda item 1.1. However, as noted in Document 4-5-6-7/220, WP5D did not include frequencies above 6425 MHz as suitable for IMT under WRC-15 under Agenda item 1.1, as WP5D stated that, “Working Party 5D indicated that it is continuing to consider the frequency ranges above 6 GHz in terms of their suitability for IMT”. In addition, as noted in Document 4-5-6-7/220, “WP5D also confirms it is continuing to study the frequency ranges above 6 GHz in the light of the evolution of technology and services, in addition to the already acknowledged suitable frequency ranges in the bands below 6 GHz.” In consequence, WP5D did not provide IMT system characteristics and deployment parameters in those frequencies and no sharing studies were conducted by JTG 4-5-6-7 in any band above 6 425 MHz between IMT systems and the existing systems or applications operating in frequencies above 6 425 MHz. Therefore, the United States maintains that WRC-15 should not address mobile service allocations or IMT identification in any bands above 6 425 MHz under WRC-15 Agenda item 1.1.

Proposal:

ARTICLE 5

Frequency allocations

Section IV – Table of Frequency Allocations

(See No. 2.1)

NOC

USA/AI 1.1/1

5 570 -7 250 MHz

| Allocation to services | | |
|------------------------|--|----------|
| Region 1 | Region 2 | Region 3 |
| ... | | |
| 5 925 -6 700 | FIXED 5.457 FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B MOBILE 5.457C 5.149 5.440 5.458 | |
| 6 700-7 075 | FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.441 MOBILE 5.458 5.458A 5.458B 5.458C | |
| ... | | |

...

248-3 000 GHz

| Allocation to services | | |
|------------------------|-----------------------|----------|
| Region 1 | Region 2 | Region 3 |
| ... | | |
| 275-3 000 | (Not allocated) 5.565 | |
| ... | | |

Reasons: This proposal for NOC applies for 6 425 MHz and above. WP5D did not include any frequencies above 6 425 MHz as suitable for IMT, and WP5D did not provide to JTG 4-5-6-7 IMT system characteristics and deployment parameters in those frequencies. In consequence, no sharing studies were conducted in JTG4-5-6-7 for any band above 6 425 MHz. Therefore, WRC-15 should not address mobile service allocations or IMT identification in any bands above 6 425 MHz under Agenda item 1.1.

UNITED STATES OF AMERICA
PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 1.4: *to consider the possibility of making an allocation of an appropriate amount of spectrum, not necessarily contiguous, to the amateur service on a secondary basis within the band 5 250-5 450 kHz, in accordance with Resolution 649 (WRC-12)*

Background Information: This agenda item considers the possibility of an allocation of spectrum for the amateur service on a secondary basis in the 5 250 – 5 450 kHz band. Taking into account the propagation characteristics of the HF band at frequencies near 5 300 kHz and existing incumbent use in this band for disaster relief, emergencies and contingency operations, an allocation to the amateur service in the 5 250 – 5 450 kHz band must protect incumbent services in the band

Incumbent services in the 5 250 – 5 450 kHz range include the fixed, mobile (except aeronautical mobile), and radiolocation² services. Experience has shown that amateur service operation is incompatible with HF radiolocation, therefore the 5 250 – 5 275 kHz range is not suitable to satisfy this agenda item. Existing fixed and mobile use in this band is in direct support of law enforcement, disaster relief, emergencies, and contingency operations. Making use of this band by the amateur service is, therefore, incompatible. Some administrations permit amateur service licensee privileges within the 5 275 – 5 450 kHz range under No. 4.4, in some cases permitting operation on discrete channels, and in other cases permitting access to a frequency band.

Since amateur use of this band would be incompatible with existing services and incumbent use for disaster relief, emergencies and contingency operations in the band, the United States propose no change for the band 5 240-5 450 kHz.

Proposals:

ARTICLE 5
Frequency allocations

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

NOC USA/AI 1.4/1

² The allocation to the radiolocation service is in the band 5 250-5 275 kHz and comes into force on 1 January 2013.

5 250-5 450 kHz

| Allocation to services | | |
|---|--|--|
| Region 1 | Region 2 | Region 3 |
| 5 250-5 275 FIXED MOBILE except aeronautical mobile Radiolocation 5.132A 5.133A | 5 250-5 275 FIXED MOBILE except aeronautical mobile RADIOLOCATION 5.132A | 5 250-5 275 FIXED MOBILE except aeronautical mobile Radiolocation 5.132A |
| 5 275-5 450 FIXED MOBILE except aeronautical mobile | | |

Reasons: Experience has shown that sharing is not possible between the amateur service and the fixed and mobile service which are heavily engaged in law enforcement, disaster relief, emergencies and contingency operations and the radiolocation service in the HF band.

SUP USA/AI 1.4/2

RESOLUTION 649 (WRC-12)

Possible allocation to the amateur service on a secondary basis at around 5 300 kHz

Reasons: Consequential to the incompatibility of an allocation to the amateur service.

WAC/077(27.08.14)

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 1.1 and 9. NTIA proposes no change to agenda item 1.1 in the bands 5010-5030 MHz and 1164-1300 MHz. NTIA also proposes no change to agenda item 9 in the band 5010-5030 MHz.

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. Mr. Charles Glass is the primary contact from my staff.

Sincerely,

(Original Signed June 24, 2014)

Karl B. Nebbia
Associate Administrator
Office of Spectrum Management

UNITED STATES OF AMERICA

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 1.1: *to consider additional spectrum allocations to the mobile service on a primary basis and identification of additional frequency bands for International Mobile Telecommunications (IMT) and related regulatory provisions, to facilitate the development of terrestrial mobile broadband applications, in accordance with Resolution 233 (WRC-12);*

Background Information: The 2012 World Radiocommunication Conference (WRC-12) recognized a need for additional radio spectrum to support the increasing mobile data traffic, and placed consideration of additional spectrum allocations for terrestrial mobile broadband applications on the Agenda for WRC-15. Joint Task Group (JTG) 4-5-6-7 was established to consider spectrum requirements for IMT/mobile broadband and compatibility studies taking into account protection requirements of other services from concerned ITU-R Working Parties.

The radionavigation-satellite service (RNSS) has allocations used for Earth-to-space operations in the 5 000-5 010 MHz band and space-to-Earth and space-to-space operations in the 5 010-5 030 MHz band. Operators plan or currently operate several global and regional non-geostationary satellite RNSS systems, including GPS, GLONASS, Beidou, QZSS, Galileo, IRNSS within these bands. RNSS shares its allocations 5 000-5 010 MHz and 5 010-5 030 MHz with the aeronautical radionavigation service (ARNS), also a safety service.

There is a long history of protecting RNSS operations in the ITU. Multiple RNSS systems and networks transmit signals around-the-clock across all three ITU Regions and radiate across the entire surface of the Earth. Although these RNSS allocations are in bands that have favorable propagation and other characteristics for mobile broadband, JTG 4-5-6-7 did not study the use of these or adjacent bands. This is indicative of the virtually universal will to protect RNSS operations on a global basis.

Due to the vital and global role of the RNSS, and lack of demonstrated in-band and adjacent band frequency sharing compatibility, no allocation to the mobile service for IMT should be considered in the bands 5 000-5 010 MHz or 5 010-5 030 MHz.

Proposal:

NOC

USA/1.1/1

ARTICLE 5

Frequency allocations

5 010-5 030 MHz

| Allocation to services | | |
|-------------------------------|--|-----------------|
| Region 1 | Region 2 | Region 3 |
| | ... | |
| 5 000-5 010 | AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (Earth-to-space) | |
| 5 010-5 030 | AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.443B | |

Reason: To ensure the protection of current and future operation of RNSS systems around the world.

UNITED STATES OF AMERICA

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 1.1: *to consider additional spectrum allocations to the mobile service on a primary basis and identification of additional frequency bands for International Mobile Telecommunications (IMT) and related regulatory provisions, to facilitate the development of terrestrial mobile broadband applications, in accordance with Resolution 233 (WRC-12);*

Background Information: The 2012 World Radiocommunication Conference (WRC-12) recognized a need for additional radio spectrum to support the increasing mobile data traffic, and placed consideration of additional spectrum allocations for terrestrial mobile broadband applications on the agenda for WRC-15. Joint Task Group (JTG) 4-5-6-7 was established to consider spectrum requirements for IMT/mobile broadband and compatibility studies taking into account protection requirements of other services from concerned ITU-R Working Parties.

The radionavigation-satellite service (RNSS) has allocations used for space-to-Earth and space-to-space systems and networks in the 1 164-1 215 MHz, 1 215-1 300 MHz and 1 559-1 610 MHz bands. Operators plan or currently operate several global and regional non-geostationary satellite RNSS systems, including GPS, GLONASS, Beidou, QZSS, Galileo, IRNSS, as well as a number of geostationary-orbit satellite networks that provide space-based augmentation services within these bands. Operators deploy RNSS receivers and applications by the hundreds of millions worldwide, and are pervasive in every facet of everyday life. People use RNSS receivers in the Global Navigation Satellite System (GNSS) and other safety-of-life applications for precision surveying, construction, agriculture, and mining, environmental monitoring (including earthquake and tsunami monitoring), precision timing applications, all within many mobile broadband devices and other handsets. RNSS shares its allocations at 1 559-1 610 MHz and, 1 164-1 215 MHz with the aeronautical radionavigation service (ARNS), also a safety service.

There is a long history of protecting RNSS operations in the ITU. Multiple RNSS systems and networks transmit signals around-the-clock across all three ITU Regions and radiate across the entire surface of the Earth. RNSS frequency bands thus are operational at all times in all locations on Earth. RNSS signals are very low power, spread-spectrum signals coming from space that are difficult to detect. It takes special processing by RNSS receivers to extract the signal from the background noise. If a high-power, continuous in time, signal in the same frequency band, or an adjacent band, is broadcast near an RNSS receiver, it could desensitize the RNSS receiver to the degree that the RNSS receiver is unable to extract the RNSS signal from space.

Studies in the ITU in preparation for WRC-2000 concluded that even relatively weak continuous in time signals from mobile-satellite service satellites in geostationary orbit would not be able to be provided on a co-frequency basis with the RNSS and ARNS in the 1 559-1 610 MHz band. CPM-99 concluded, in Section 2.2.1.3 of the CPM Report for WRC-2000, that “although studies were not carried out on every different type of RNSS receiver used in all the numerous applications of RNSS, it was nevertheless possible to conclude that sharing between ARNS/RNSS and MSS (space-to-Earth) is not feasible in any portion of the 1 559-1 567 MHz band.” WRC-2000 agreed, and declined to add a co-primary MSS allocation to a portion of the RNSS band. To protect RNSS in the 1 164-1 215 MHz band, WRC-12 modified Resolution 417 to include strict power limits on high-powered terrestrial transmitters in the adjacent aeronautical radionavigation service band at 960-1 164 MHz.

Although all the RNSS allocations are in bands that have favorable propagation and other characteristics for mobile broadband, JTG 4-5-6-7 did not study the use of these or adjacent bands. This is indicative of the virtually universal will to protect RNSS operations on a global basis.

Due to the vital and global role of the RNSS, and demonstrated in-band and adjacent band frequency sharing incompatibility, no allocation to the mobile service or designation for IMT should be considered in the bands 1 164-1 215 MHz, 1 215-1 300 MHz and 1 559-1 610 MHz. Furthermore, any proposed new use of a band adjacent to any of these RNSS bands would need to include regulations that would ensure that mobile broadband systems did not cause harmful interference to RNSS receivers (e.g., guard bands, power limits, etc.).

Proposals:

NOC USA/1.1/1

ARTICLE 5

Frequency Allocations

890-1 300 MHz

| Allocation to services | | |
|-------------------------------|--|-----------------|
| Region 1 | Region 2 | Region 3 |
| ... | | |
| 1 164-1 215 | AERONAUTICAL RADIONAVIGATION 5.328 RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.328A | |
| 1 215-1 240 | EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329 5.329A SPACE RESEARCH (active) 5.330 5.331 5.332 | |
| 1 240-1 300 | EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329 5.329A SPACE RESEARCH (active) Amateur 5.282 5.330 5.331 5.332 5.335 5.335A | |

Reason: To ensure the protection of current and future operation of RNSS systems around the world.

ARTICLE 5

Frequency Allocations

1 525-1 610 MHz

| Allocation to services | | |
|-------------------------------|---|-----------------|
| Region 1 | Region 2 | Region 3 |
| ... | | |
| 1 559-1610 | AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.208B 5.328B 5.329A 5.314 5.362B 5.362C | |

Reason: To ensure the protection of current and future operation of RNSS systems around the world.

UNITED STATES OF AMERICA

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 9: *to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention; 9.1: on the activities of the Radiocommunication Sector since WRC-12;*

Background Information: RR No. **5.443C** was adopted at WRC-12 in conjunction with a new AM(R)S allocation in 5 030-5 091 MHz to enable use of unmanned aircraft systems in that band while ensuring protection of RNSS systems and networks in the adjacent 5 010-5 030 MHz (space-to-Earth) and (space-to-space) RNSS band. No. **5.443C** states:

The use of the frequency band 5 030-5 091 MHz by the aeronautical mobile (R) service is limited to internationally standardized aeronautical systems. Unwanted emissions from the aeronautical mobile (R) service in the frequency band 5 030-5 091 MHz shall be limited to protect RNSS system downlinks in the adjacent 5 010-5 030 MHz band. Until such time that an appropriate value is established in a relevant ITU-R Recommendation, the e.i.r.p. density limit of -75 dBW/MHz in the frequency band 5 010-5 030 MHz for any AM(R)S station unwanted emission should be used. (WRC-12)

The BR Director's CPM Report is very likely to reference RR No. **5.443C**, since it contains the phrase, "*Until such time that an appropriate value is established in a relevant ITU-R Recommendation...*" In May 2012, WP 4C began work toward finalizing the provisional e.i.r.p. density limit of -75 dBW/MHz limit in No. **5.443C** with a liaison statement to WP 5B (cf. Doc. 5B/57) and this work was reported to SG 4 (cf. Doc. 4/15). However, WP 5B (cf. Doc. 4C/104) and ICAO (cf. § 3.2, Doc. 4C/173) have communicated that no AM(R)S transmitter characteristics are available to perform compatibility studies. Therefore, the ITU can develop no such Recommendation at this time.

Although the USA consented to No. **5.443C**, prior compatibility studies had not been performed within the ITU-R for the adjacent-band compatibility of RNSS and AM(R)S in the 5 GHz band. This is reflected in the call for "*an appropriate value*" of the out-of-band AM(R)S e.i.r.p. density limit. However, the USA has agreed that the current provisional limit is acceptable given the current state of knowledge. At this time, a change to No. **5.443C** could have unintended consequences, and so, to prevent WRC-15 from making any changes without having performed the appropriate ITU-R studies, the USA proposes NOC on any proposals to alter RR No. **5.443C**.

Proposal:

NOC

USA/9.1/1

ARTICLE 5

Frequency allocations

RR No. **5.443C (WRC-12)**

Reason: The ITU-R has not yet completed the necessary studies to establish an appropriate value in a relevant ITU-R Recommendation for the e.i.r.p. density limit required in the frequency band 5 010-5 030 MHz for AM(R)S station unwanted emissions in order to ensure protection of RNSS system and network operations (space-to-Earth) and (space-to-space) in that band.

WAC/078(27.08.14)

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 7 advance publication information (API). NTIA proposes modifying agenda item 7 (API).

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. Mr. Charles Glass is the primary contact from my staff.

Sincerely,

(Original Signed July 11, 2014)

Karl B. Nebbia
Associate Administrator
Office of Spectrum Management

UNITED STATES OF AMERICA

PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 7: *to consider possible changes in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution 86 (Rev.WRC-07) to facilitate rational, efficient, and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit*

Background Information: There has been a longstanding requirement in Article 9 of the Radio Regulations, under No. **9.1**, for the Radiocommunication Bureau to wait a required six months after receiving the advanced publication information (API) for satellite networks requiring coordination under Section II of Article 9 before accepting the coordination request information, even if both sets of information are submitted to the Bureau (BR) at the same time. While this six-month delay may have served a purpose in years past when there was a substantial amount of technical data included in, the API for administrations to consider and potentially comment upon, this is no longer the case. As a consequence of the simplification of the Radio Regulations at WRC-95, the API for satellite networks requiring coordination under Section II of Article 9 includes very limited information (e.g. orbital position and frequency bands) and, as such, there is little for administrations to review and comment. This required six month delay therefore serves no purpose other than to delay the overall start of coordination process for satellite networks.

In addition to creating a delay to the start of the coordination process, the six-month period adds considerable uncertainty as to the potential availability of frequency assignments at any given orbital location. Whereas the SRS database maintained by the ITU BR can be queried and carefully examined in the process of searching for and identifying a potential orbital location at which a new satellite network could be launched and operated in a given frequency band, once an API for this new network is submitted there is six months of uncertainty as the filing administration must wait to see if another administration, which may have an API in the vicinity that has already been submitted to the ITU and is still valid, files a coordination request in advance of the BR's receipt of the coordination request associated with the new API. Discussion within the ITU-R has revealed that one of the primary reasons for administrations periodically submitting multiple API requests at every 2 or 3 degrees, or even every 6 degrees, around the geostationary orbit is precisely to circumvent this six-month delay between Bureau receipt of the API and CR/C. Six- months after the first "batch" of APIs is accepted by the BR from an administration, the administration is then in a position to subsequently submit a CR/C to the BR at virtually any orbital position. As long as the administration submits the next batch of APIs within 18 months of the first batch this workaround solution continues.

The United States proposes modifications to Article 9 of the Radio Regulations to address the six-month delay between the Bureau receipt of an API and CR/C, which no longer serves a useful purpose. Under the current practice, the BR publishes an API submitted under No. **9.1** within 3 months according to the provisions of No. **9.2B**. Administrations may submit comments within 4 months under No. **9.3**, however, the coordination cannot start any sooner than 6 months after BR receipt of the API. With the six-month delay between API and CR/C, the timing for comments on an API and start of coordination are already in close alignment. A modified scenario with no 6 month delay would allow for coordination to start immediately, even before receiving administration comments under No. **9.3**.

Proposal:

ARTICLE 9

Procedure for effecting coordination with or obtaining agreement of other administrations^{1, 2, 3, 4, 5, 6, 7, 8, 8bis} (WRC-12)

Section I – Advance publication of information on satellite networks or satellite systems

General

MOD USA/7/1

9.1 Before initiating any action under this Article or under Article **11** in respect of frequency assignments for a satellite network or a satellite system, an administration, or one⁹ acting on behalf of a group of named administrations, shall, prior to the coordination procedure described in Section II of Article **9** below, where applicable, send to the Bureau a general description of the network or system for advance publication in the International Frequency Information Circular (BR IFIC) not earlier than seven years and preferably not later than two years before the planned date of bringing into use of the network or system (see also No. **11.44**). The characteristics to be provided for this purpose are listed in Appendix **4**. The coordination or notification information may also be communicated to the Bureau at the same time. Where coordination information is required by Section II of Article 9, the coordination information it shall be considered as having been received by the Bureau upon its actual date of receipt whereas notification information shall be considered as having been received by the Bureau not earlier than six months after the date of receipt of the coordination information, for advance publication where coordination is required by Section II of Article 9. Where coordination is not required by Section II, notification shall be considered as having been received by the Bureau not earlier than six months after the date of publication of the advance publication information. (WRC-1503)

Reasons: To address the unnecessary requirement for the Radiocommunications Bureau to wait six months after receipt of the advanced publication information before receiving the coordination request information for satellite networks requiring coordination under Section II of Article 9.

MOD USA/7/2

9.5B If, upon receipt of the BR IFIC containing information published under No. **9.2B**, any administration considers its existing or planned satellite systems or networks or terrestrial stations¹¹ to be affected, it may send its comments to the publishing administration, so that the latter may take those comments into consideration during when initiating the coordination procedure. A copy of these comments may also be sent to the Bureau. Thereafter, both

administrations shall endeavor to cooperate in joint efforts to resolve any difficulties, with the assistance of the Bureau, if so requested by either of the parties, and shall exchange any additional relevant information that may be available. (WRC-201500)

Reasons: To address the unnecessary requirement for the Radiocommunications Bureau to wait six months after receipt of the advanced publication information before receiving the coordination request information for satellite networks requiring coordination under Section II of Article 9.

WAC/080(27.08.14)

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 revisions for the draft Executive Branch proposals for WRC-15 agenda items 1.6.1, 1.6.2, and a draft Executive Branch proposal for WRC-15 agenda item 10. NTIA proposes further no change proposals to the table of allocations for agenda items 1.6.1 and 1.6.2. NTIA also proposes modifying Resolution 806 (WRC-15), to add an agenda item for 5 GHz RLAN in the 5350-5470 MHz frequency range to WRC-19.

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. Mr. Charles Glass is the primary contact from my staff.

Sincerely,

(Original Signed July 31, 2014)

Karl B. Nebbia
Associate Administrator
Office of Spectrum Management

UNITED STATES OF AMERICA

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 1.6.1: *to consider possible additional primary allocations, to the fixed-satellite service (Earth-to-space and space-to-Earth) of 250 MHz in the range between 10 GHz and 17 GHz in Region 1; and review the regulatory provisions on the current allocations to the fixed-satellite service (FSS) within each range, taking into account the results of ITU-R studies, in accordance with Resolutions 151 (WRC-12)*

Background Information: The 13.25-13.4 GHz frequency band has allocations to the Earth exploration-satellite service (EESS) (active), the aeronautical radionavigation service (ARNS) and the space research service (active) on a primary basis in all three ITU regions subject to Radio Regulation Nos. **5.497**, **5.498A**, and **5.499**.

ITU-R sharing studies demonstrate that the proposed fixed-satellite service (FSS) (space-to-Earth) links will interfere with the ARNS in the bands 13.25-13.4 GHz. The studies show that the ARNS transmissions would cause interference into the FSS earth station receivers.

The 13.4-13.75 GHz frequency band has allocations to the Earth exploration-satellite service (active), the radiolocation service and the space research service (active) on a primary basis in all three ITU regions. RR No. **5.501A** indicates that the use of the band 13.4-13.75 GHz by the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the band by the space research service are on a secondary basis. RR Nos. **5.499**, **5.500**, **5.501**, and **5.501B** apply.

ITU-R sharing studies demonstrate that the proposed fixed-satellite service (FSS) (Earth-to-space) links in the 13.25-13.75 GHz bands will interfere with existing authorized services in the bands 13.25-13.4 GHz and 13.4-13.75 GHz. The sharing studies' results show that EESS (active) altimeter measurements of lakes, reservoirs, and coastal areas will be lost over a large area of the Earth spanning over all three ITU regions. Mitigation techniques sufficient to protect the EESS (active) altimeters operating in the current allocations may impose severe if not impractical restrictions on new FSS systems that might operate in this band.

The 14.5-15.35 GHz frequency range has allocations to the fixed and mobile radio services on a primary basis in all three ITU regions. The frequency band 14.5-14.8 GHz also has an allocation to fixed-satellite service on a primary basis in all three ITU regions subject to Radio Regulation No. **5.510**. No. **5.510** limits FSS use to feeder links for the broadcasting satellite service outside Europe, which are subject to the Appendix **30A** Broadcast Satellite Plan and associated procedures. The space research service has an allocation on a secondary basis in the frequency band 14.5-15.35 GHz in all three regions. Aeronautical mobile data links currently operate in the 14.5-15.35 GHz band under the mobile service (MS) allocation, the parent service to aeronautical mobile service (AMS).

The band 15.4-17.0 GHz has allocations to the radiolocation service (RLS) on a primary basis in all three Regions and to the aeronautical radionavigation service on a primary basis in all three Regions. Some Administrations will operate airborne synthetic aperture radars worldwide as part of the global RLS

allocation in the band 15.4-17 GHz. Some Administrations also operate an airport surface detection system on a co-primary basis with the primary RLS in the band 15.7-16.2 GHz.

ITU-R sharing studies demonstrate that the proposed FSS (Earth-to-space) links in the 10.0-17.0 GHz bands will interfere with existing authorized services in the bands 14.5-15.35 GHz and 15.4-17.0 GHz. The sharing studies' results show that in order to protect the AMS receivers operating in the band 14.5-15.35 GHz band, there is a required separation distance of up to 577 km (not accounting for terrain obstruction). The studies also show that in order to protect radiolocation stations operating in the band 15.4-17.0 GHz, a separation distance of up to 420 km (not accounting for terrain obstruction) is required. Given the large, required separation distances around AMS and RLS receivers' operational area and the mobile nature of AMS/RLS airborne receiver, the ubiquitous deployment of FSS transmitters would make mitigation and coordination approaches to permit sharing with the FSS very difficult or impractical. In addition, FSS space station receivers in the geostationary satellite orbit may be subject to unacceptable levels of interference from existing operations in these bands.

With respect to FSS downlinks from Region 1 operating in the band 15.4-17.0 GHz, ITU-R studies indicate radiolocation stations in Region 2 operating in the band 15.4-17.0 GHz may receive unacceptable levels of interference from FSS space stations in the geostationary satellite orbit and FSS downlink earth stations may receive unacceptable levels of interference from airborne stations beyond the radio horizon. Mitigation techniques sufficient to protect the systems operating in the current allocations may impose severe if not impractical restrictions on new FSS systems that might operate in this band.

With respect to FSS downlinks from Region 1 operating in the band 13.4-13.75 GHz, ITU-R studies indicate that EESS (active) systems operating across all three ITU regions in the band 13.4-13.75 GHz will not be unduly constrained. Therefore, operations of U.S. EESS (active) assets operating in the 13.4-13.75 GHz band on a global basis would not be adversely affected by an ITU Region 1 FSS (s-E) allocation in the 13.4-13.75 GHz band.

Proposal:

ARTICLE 5

Frequency allocations

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

NOC USA/1.6.1/1

11.7-14 GHz

| Allocation to services | | |
|-------------------------------|---|-----------------|
| Region 1 | Region 2 | Region 3 |
| 13.25-13.4 | EARTH EXPLORATION-SATELLITE (active) AERONAUTICAL RADIONAVIGATION 5.497 SPACE RESEARCH (active) 5.498A 5.499 | |

Reasons: ITU-R studies indicate a potential for interference into existing EESS (active) systems from FSS (E-s). ITU-R studies indicate a potential for interference between the proposed FSS (s-E) and the existing ARNS systems.

NOC USA/1.6.1/2

11.7-14 GHz

| Allocation to services | | |
|------------------------|---|----------|
| Region 1 | Region 2 | Region 3 |
| 13.4-13.75 | EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.501A Standard frequency and time signal-satellite (Earth-to-space) 5.499 5.500 5.501 5.501B | |

Reasons: ITU-R studies indicate a potential for interference into existing EESS (active) systems from FSS (Earth-to-space). EESS (active) systems would not be adversely impacted if Region 1 were to implement FSS (space-to-Earth) links in this band. This NOC proposal applies only with regard to the FSS (Earth-to-space) direction.

NOC USA/1.6.1/3

14-15.4 GHz

| Allocation to services | | |
|------------------------|---|----------|
| Region 1 | Region 2 | Region 3 |
| 14.5-14.8 | FIXED FIXED-SATELLITE (Earth-to-space) 5.510 MOBILE Space research | |
| 14.8-15.35 | FIXED MOBILE Space research 5.339 | |

Reasons: ITU-R studies indicate a potential for interference into existing MS and AMS systems.

NOC USA/1.6.1/4

15.4-18.4 GHz

| Allocation to services |
|------------------------|
| |

| Region 1 | Region 2 | Region 3 |
|--------------------|--|----------|
| 15.4-15.43 | RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION 5.511D | |
| 15.43-15.63 | FIXED-SATELLITE (Earth-to-space) 5.511A RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION 5.511C | |
| 15.63-15.7 | RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION 5.511D | |
| 15.7-16.6 | RADIOLOCATION 5.512 5.513 | |
| 16.6-17.1 | RADIOLOCATION Space research (deep space) (Earth-to-space) 5.512 5.513 | |

Reasons: ITU-R studies indicate a potential for interference into existing RLS systems.

SUP USA/1.6.1/5

RESOLUTION 151 (WRC-12)

**Allocations, to the fixed-satellite service
(Earth-to-space and space-to-Earth)
of 250 MHz in the range between 10 GHz and 17 GHz in Region 1**

Reasons: Consequential change to completion of the agenda item.

UNITED STATES OF AMERICA

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 1.6.2: *to consider possible additional primary allocations, to the fixed-satellite service (Earth-to-space) of 250 MHz in Region 2 and 300 MHz in Region 3 within the range 13-17 GHz; and review the regulatory provisions on the current allocations to the fixed-satellite service within each range, taking into account the results of ITU-R studies, in accordance with Resolutions 152 (WRC-12)*

Background Information: The 13.25-13.4 GHz frequency band has allocations to the Earth exploration-satellite service (active), the aeronautical radionavigation service and the space research service (active) on a primary basis in all three ITU regions subject to Radio Regulation Nos. **5.497**, **5.498A**, and **5.499**.

The 13.4-13.75 GHz frequency band has allocations to the Earth exploration-satellite service (active), the radiolocation service and the space research service (active) on a primary basis in all three ITU regions. RR No. **5.501A** indicates that the use of the band 13.4-13.75 GHz by the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the band by the space research service are on a secondary basis. RR Nos. **5.499**, **5.500**, **5.501**, and **5.501B** apply.

ITU-R sharing studies demonstrate that the proposed fixed-satellite service (FSS) (Earth-to-space) links in the 13.25-13.75 GHz bands will interfere with existing authorized services in the bands 13.25-13.4 GHz and 13.4-13.75 GHz. The sharing studies' results show that EESS (active) altimeter measurements of lakes, reservoirs, and coastal areas will be lost over a large area of the Earth spanning over all three ITU regions. Mitigation techniques sufficient to protect the EESS (active) altimeters operating in the current allocations may impose severe if not impractical restrictions on new FSS systems that might operate in this band.

The 14.5-15.35 GHz frequency range has allocations to the fixed and mobile radio services on a primary basis in all three ITU Regions. The 14.5-14.8 GHz frequency band also has an allocation to the fixed-satellite service on a primary basis in all three ITU Regions subject to Radio Regulation No. **5.510**. No. **5.510** limits FSS use to feeder links for the broadcasting satellite service outside Europe, which are subject to the Appendix **30A** Broadcast Satellite Plan and associated procedures. The space research service has an allocation on a secondary basis in the frequency band 14.5-15.35 GHz in all three regions. Aeronautical mobile data links currently operate in the 14.5-15.35 GHz band under the mobile service (MS) allocation, the parent service to aeronautical mobile service (AMS).

The 15.4-17.0 GHz band is allocated to the radiolocation service (RLS) on a primary basis in all three Regions and the 15.4-15.7 GHz band is also allocated to the aeronautical radionavigation service on a primary basis in all three Regions. Some Administrations will operate synthetic aperture radars worldwide as part of the global RLS allocation in the band 15.4-17 GHz. Some Administrations also operate an airport surface detection system on a co-primary basis with the primary RLS in the band 15.7-16.2 GHz.

ITU-R sharing studies demonstrate that the proposed FSS (Earth-to-space) links in the 13.0-17.0 GHz bands will interfere with existing services in the bands 14.5-15.35 GHz and 15.4-17.0 GHz. The sharing studies' results show that in order to protect the AMS receivers operating in the band 14.5-15.35 GHz, a separation distance of up to 577 km (not accounting for terrain obstruction) is required. The studies also show that in order to protect radiolocation stations operating in the band 15.4-17.0 GHz, a separation distance of up to 420 km (not accounting for terrain obstruction) is required. Given the large, required separation distances around AMS and RLS receivers' operational areas, and the mobile nature of AMS receiver/RLS airborne receiver, the ubiquitous deployment of FSS transmitters would make mitigation and coordination approaches to permit sharing with the FSS very difficult or impractical. In addition, ITU-R studies have yet to demonstrate how FSS space station receivers in the geostationary satellite orbit could mitigate unacceptable levels of interference from existing operations in these bands.

Proposal:

ARTICLE 5
Frequency allocations

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

NOC USA/1.6.2/1

11.7-14 GHz

| Allocation to services | | |
|-------------------------------|---|-----------------|
| Region 1 | Region 2 | Region 3 |
| 13.25-13.4 | EARTH EXPLORATION-SATELLITE (active) AERONAUTICAL RADIONAVIGATION 5.497 SPACE RESEARCH (active) 5.498A 5.499 | |

Reasons: ITU-R studies indicate a potential for interference into existing EESS (active) systems.

NOC USA/1.6.2/2

11.7-14 GHz

| |
|-------------------------------|
| Allocation to services |
|-------------------------------|

| Region 1 | Region 2 | Region 3 |
|------------|---|----------|
| 13.4-13.75 | EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.501A Standard frequency and time signal-satellite (Earth-to-space) 5.499 5.500 5.501 5.501B | |

Reasons: ITU-R studies indicate a potential for interference into existing EESS (active) systems.

NOC USA/1.6.2/3

14-15.4 GHz

| Allocation to services | | |
|------------------------|---|----------|
| Region 1 | Region 2 | Region 3 |
| 14.5-14.8 | FIXED FIXED-SATELLITE (Earth-to-space) 5.510 MOBILE Space research | |
| 14.8-15.35 | FIXED MOBILE Space research 5.339 | |

Reasons: ITU-R studies indicate a potential for interference into existing MS and AMS systems.

NOC USA/1.6.2/4

15.4-18.4 GHz

| Allocation to services | | |
|------------------------|--|----------|
| Region 1 | Region 2 | Region 3 |
| 15.4-15.43 | RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION 5.511D | |
| 15.43-15.63 | FIXED-SATELLITE (Earth-to-space) 5.511A RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION 5.511C | |
| 15.63-15.7 | RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION 5.511D | |
| 15.7-16.6 | RADIOLOCATION 5.512 5.513 | |

16.6-17.1

RADIOLOCATION

Space research (deep space) (Earth-to-space)

5.512 5.513

Reasons: ITU-R studies indicate a potential for interference into existing RLS systems.

SUP

USA/1.6.2/5

RESOLUTION 152 (WRC-12)

**Allocations to the fixed-satellite service (Earth-to-space)
of 250 MHz in Region 2 and 300 MHz in Region 3
within the range 13-17 GHz.**

Reasons: Consequential change to completing the agenda item.

UNITED STATES OF AMERICA

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 10: *to recommend to the Council, items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, in accordance with Article 7 of the Convention*

Background Information: Increasing demand for broadband data capacity is leading the industry to increasingly rely on opportunities for off-loading from traditional cellular networks onto Radio Local Area Network (RLAN) and small-celled wireless infrastructure. Additionally, there is strong demand for inexpensive, widely available, high-speed internet access and networking capabilities.

To address this demand for greater network data capacity, WRC-15 Agenda Item 1.1 considered additional primary mobile service allocations for terrestrial mobile broadband capabilities, including the possible expansion of RLAN use into the 5350-5470 MHz band.

Initial studies conducted in Joint Task Group (JTG) 4-5-6-7 indicated that sharing was not possible between RLANs and incumbent services in the 5350-5470 MHz band utilizing existing mitigation measures. The existing mitigation techniques studied included a 200 mW power limit, indoor restriction, and Dynamic Frequency Selection (DFS) designed for the 5150-5350 MHz and 5470-5725 MHz frequency bands. Additionally, the same ITU working parties began exploring possible new mitigation techniques to enable sharing between RLANs and incumbent services in the 5350-5470 MHz. Unfortunately, the WRC-15 study cycle provided insufficient time to complete the development and consideration of the proposed mitigation techniques and further study is required.

Given the increased demand for RLANs, along with the need to ensure protection of important incumbent services, the United States of America proposes a future WRC agenda item to continue the studies and consider additional mitigation measures that may enable sharing between RLANs and incumbent services in the 5350-5470 MHz band.

Proposal:

MOD USA/10/1

RESOLUTION 806 (WRC-15)

Agenda for the 2019 World Radiocommunication Conference

The World Radiocommunication Conference (Geneva, 2015),

ADD USA/10/2

1.[5 GHz] to consider, in accordance with Resolution **[5GHz] (WRC-2015)**, regulatory provisions and additional allocations to the mobile service in the 5350-5470 MHz band, taking into account the results of studies;

Reasons: To enable wide-band applications for RLAN at 5350-5470 MHz while ensuring protection of incumbent services.

ADD USA/10/3

RESOLUTION [5GHZ] (WRC-15)

Consideration of a mobile service allocation and identification for the implementation of wireless access systems (WAS) including radio local area networks (RLAN) in the 5350-5470 MHz band

The World Radiocommunication Conference (Geneva, 2003),

considering

- a) that since WRC-07 there has been tremendous growth in the demand for mobile broadband applications with multimedia capabilities;
- b) that in many developing markets the main delivery mechanism for broadband access is expected to be through mobile devices;
- c) that adequate and timely availability of spectrum and supporting regulatory provisions is essential to support future growth of mobile broadband systems;
- d) that the band 5 350-5 460 MHz is allocated worldwide on a primary basis to the Earth exploration-satellite service (active) (No. **5.448B**);
- e) that the band 5 350-5 460 MHz is also allocated worldwide on a primary basis to the space research service (active) (No. **5.448C**);
- f) that the band 5 350-5 460 MHz is allocated worldwide on a primary basis to the aeronautical radionavigation service (No. **5.449**);
- g) that the band 5 350-5 470 MHz is also allocated worldwide on a primary basis to the radiolocation service (No. **5.448D**);
- h) that the band 5 460-5 470 MHz is allocated worldwide on a primary basis to the radionavigation service (No. **5.449**);
- i) that the band 5 460-5 470 MHz is also allocated worldwide on a primary basis to the EESS (active), SRS (active), and radiolocation service (No. **5.448D**);
- j) that there is a need to protect the existing primary services in the 5 150-5 350 MHz, 5350-5470 MHz, and 5 470-5 725 MHz bands;
- k) that studies have shown that sharing between incumbent services and mobile service applications in the frequency range 5 350-5 470 MHz is not possible with current mitigation techniques but may be possible if new or advanced mitigation techniques are developed that prove to be feasible and able to be fielded in commercially viable systems;
- l) that there is a need to specify operational restrictions for WAS, including RLANs, in the mobile service in the band 5 350-5 470 MHz in order to protect incumbent service systems;
- m) that the deployment density of WAS, including RLANs, will depend on a number of factors including intrasystem interference and the availability of other competing technologies and services,

noting

- a) that initial studies have begun in the ITU-R based on work for consideration of potential mobile allocations and identification for terrestrial mobile allocations under WRC-15 agenda item 1.1;
- b) that the regulatory provisions for RLANs to enable sharing in the frequency ranges 5150-5350 MHz and 5470-5725 MHz is insufficient to enable sharing in the 5350-5470 MHz frequency range;

recognizing

- a) that WAS, including RLANs, provide effective broadband solutions;
- b) that there is a need for administrations to ensure that WAS, including RLANs, meet the required mitigation techniques, for example, through equipment or standards compliance in conjunction with effective regulatory procedures,

resolves

that WRC-19 consider a mobile allocation and identification to WAS including RLAN in the 5350-5470 MHz frequency range while ensuring:

- 1 Protection of current and future deployments of incumbent services;
- 2 Consideration of effective operational requirements which can be implemented by WAS including RLAN to enable sharing with incumbent services,

invites ITU-R

to conduct, and complete in time for WRC-19, the appropriate studies leading to technical and operational recommendations to facilitate sharing between WAS including RLAN and the incumbent services.

ATTACHMENT

PROPOSAL FOR ADDITIONAL AGENDA ITEM FOR CONSIDERATION OF A MOBILE SERVICE ALLOCATION AND IDENTIFICATION FOR RLAN FOR THE IMPLEMENTATION OF WIRELESS ACCESS SYSTEMS INCLUDING RADIO LOCAL AREA NETWORKS IN THE 5350-5470 MHZ BAND

Subject: Proposed Future WRC Agenda Item for WRC-2019 for consideration of a mobile service allocation and identification for RLAN for the implementation of wireless access systems including radio local area networks in the 5350-5470 MHz band

Origin: United States of America

Proposal: To consider a mobile service allocation and identification for RLAN for the implementation of wireless access systems including radio local area networks in the 5350-5470 MHz band.

Background/reason:

Initial studies conducted in Joint Task Group (JTG) 4-5-6-7 indicated that sharing was not possible between RLANs and incumbent services in the 5350-5470 MHz band utilizing existing mitigation measures. The existing mitigation techniques studied included a 200 mW power limit, indoor restriction, and Dynamic Frequency Selection (DFS) designed for the 5150-5350 MHz and 5470-5725 MHz frequency bands. Additionally, the same ITU working parties began exploring possible new mitigation techniques to enable sharing between RLANs and incumbent services in the 5350-5470 MHz. Unfortunately, the WRC-15 study cycle provided insufficient time to complete the development and consideration of the proposed mitigation techniques and further study is required.

Radiocommunication services concerned: Earth Exploration-Satellite Service (active), Space Research Service (active), Aeronautical Radionavigation, Radiolocation and Radionavigation

Indication of possible difficulties: None foreseen.

Previous/ongoing studies on the issue: Studies are underway in WP 5A, WP 5B and WP 7C to examine mitigation techniques. JTG 4-5-6-7 conducted initial sharing studies during WRC-15 study cycle.

Studies to be carried out by: SG 5 | **with the participation of:** SG 7

ITU-R Study Groups concerned: SG 5 and SG 7

ITU resource implications, including financial implications (refer to CVI26): Minimal

Common regional proposal: Yes/No **Multicountry proposal:** Yes/No
Number of countries:

Remarks