

FINAL MINUTES

Minutes of the Second Meeting of the FCC Advisory Committee for the 2015 World Radiocommunication Conference (WRC-15)

Date/Time: October 1, 2012, at 10:00 a.m.

Location: Federal Communications Commission
Commission Meeting Room (TW-C305)
445 12th Street, S.W., Washington, D.C.

Committee Members Attending: See Appendix 1

Other Persons Attending: See Appendix 2

Meeting Summary:

1. Opening Remarks

WRC-15 Advisory Committee (Committee) Chair Mr. Harris opened the meeting. He commented that it had been less than two months since the last meeting and that an astonishing amount of work has been completed. Mr. Harris congratulated the Committee membership on the work that has been accomplished.

2. Approval of the Agenda

The agenda, Document **WAC/007(01.10.12)**, was approved without change.

3. Minutes of the First Meeting

The minutes of the first meeting, **Document WAC/005(09.08.12)** were approved.

4. Reports of Other WRC-15 Regional Preparatory Meetings

Mr. Roytblat, the Designated Federal Official for the Committee, introduced a report, Document **WAC/017(01.10.12)**, of the WRC-15 preparatory meeting held by the Asia-Pacific Telecommunity (APT). He invited the membership to review the report so as to be cognizant of those issues on which other organizations are focused. Mr. Jansky, Jansky-Barmat Telecommunications, Inc., asked if the APT had approved any preliminary views for WRC-15. Mr. Roytblat indicated that no preliminary views had been adopted at this meeting, and explained that APT plans to adopt preliminary views at its next meeting in 2013.

5. NTIA Draft Preliminary Views

Ms. Cornell, Vice chair of the WRC-15 Advisory Committee, acknowledged that the FCC's federal colleagues have also been busy preparing for WRC-15, and introduced Documents **WAC/006(01.10.12)** and **WAC/008(01.10.12)**, preliminary views of the National Telecommunications and Information Administration (NTIA). Dr. Drazenovich of NTIA stated that the Radio Conference Subcommittee (RCS) is meeting on October 2, 2012 and plans to review the WRC-15 Advisory Committee recommendations at that time. Ms. Cornell thanked Dr. Drazenovich for her input.

6. IWG Status reports and Consideration of Preliminary Views

IWG-1: Maritime, Aeronautical and Radar Services

Ms. Allison, Chair of IWG-1, reported that IWG-1 met twice since the last meeting of the Committee, and had three preliminary views for the Committee to consider.

Agenda Item 1.13: to review No. **5.268** with a view to examining the possibility for increasing the 5 km distance limitation and allowing space research service (space-to-space) use for proximity operations by space vehicles communicating with an orbiting manned space vehicle, in accordance with Resolution **652 (WRC 12)** – Document **WAC/025(01.10.12)**, a draft preliminary view based on NTIA's draft preliminary view, was approved.

Agenda Item 1.17: to consider possible spectrum requirements and regulatory actions, including appropriate aeronautical allocations, to support wireless avionics intra-communications (WAIC), in accordance with Resolution **423 (WRC-12)** – Document **WAC/026(01.10.12)**, a draft preliminary view, also based on NTIA's draft preliminary view, was approved.

Agenda Item 1.18: to consider a primary allocation to the radiolocation service for automotive applications in the 77.5-78.0 GHz frequency band in accordance with Resolution **654 (WRC-12)** – Document **WAC/027(01.10.12)**, a draft preliminary view based on NTIA's draft preliminary view. Mr. Joseph Dockemeyer of Delphi stated that Delphi is still digesting the effect of the draft preliminary view on radars, but that Delphi is okay with the draft preliminary view and will follow development of the draft proposal on Agenda Item 1.18. Ms. Allison invited Mr. Dockemeyer to participate in IWG-1. Ms. Cornell asked if there were additional comments. There being none Document **WAC/027(01.10.12)**, a draft preliminary view, was approved.

Ms. Allison stated that IWG-1 had considered and supports NTIA's draft preliminary view on Agenda Item 1.14, to consider the feasibility of achieving a continuous reference time-

scale, whether by the modification of coordinated universal time (UTC) or some other method, and take appropriate action, in accordance with Resolution **653 (WRC-12)**, as contained in Document **WAC/008(01.10.12)**.

IWG-2 – Terrestrial Services

Mr. Harris announced that both the Chair and Vice Chair of IWG-2 were unable to attend the meeting. In their absence, Mr. Roytblat reported on the work of IWG-2 since the last meeting.

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)** – Document **WAC/020(01.10.12)**, a draft preliminary view concerning the bands 1164-1215 MHz, 1215-1300 MHz, and 1559-1610 MHz, was approved.

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)** – Document **WAC/021(01.10.12)**, a draft preliminary view concerning the bands 470-698 MHz, was approved.

Mr. Roytblat reported that IWG-2 is continuing to consider other frequency bands under Agenda Item 1.1 but IWG-2 is not prepared to offer any recommendation at this time.

Agenda Item 1.2: to examine the results of ITU-R studies, in accordance with Resolution **232 (WRC-12)**, on the use of the frequency band 694-790 MHz by the mobile, except aeronautical mobile, service in Region 1 and take the appropriate measures – Document **WAC/022(01.10.12)**, a draft preliminary view, was approved.

Agenda Item 1.3: to review and revise Resolution **646 (Rev.WRC-12)** for broadband public protection and disaster relief (PPDR), in accordance with Resolution **648 (WRC-12)** – Document **WAC/023(01.10.12)**, a draft preliminary view, was developed by IWG-2 following consideration of NTIA's draft preliminary view. Document **WAC/023(01.10.12)**, a draft preliminary view, was approved.

Agenda Item 1.4: to consider possible new allocation to the amateur service on a secondary basis within the band 5 250-5 450 kHz in accordance with Resolution **649 (WRC-12)** – Document **WAC/024(01.10.12)**, a draft preliminary view, was approved.

IWG-3 – Space Services

Mr. Wengryniuk, Chair of IWG-3, reported that IWG-3 met three times since the last meeting of the Committee.

Agenda Item 1.5: to consider the use of frequency bands allocated to the fixed-satellite service not subject to Appendices **30**, **30A** and **30B** for the control and non-payload communications of unmanned aircraft systems (UAS) in non-segregated airspace, in accordance with Resolution **153 (WRC-12)** – Document **WAC/009(01.10.12)**, a draft preliminary view, was approved.

Agenda Item 1.7: to review the use of the band 5 091-5 150 MHz by the fixed-satellite service (Earth-to-space) (limited to feeder links of the non-geostationary mobile-satellite systems in the mobile-satellite service) in accordance with Resolution **114 (Rev.WRC-12)** – Document **WAC/010(01.10.12)**, a draft preliminary view, was approved.

Agenda Item 1.8: to review the provisions relating to earth stations located on board vessels (ESVs), based on studies conducted in accordance with Resolution **909 (WRC-12)** – Document **WAC/011(01.10.12)**, a draft preliminary view, was approved.

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 within this range, taking into account the results of ITU-R studies, in accordance with Resolution **151 (WRC-12)** – Document **WAC/012(01.10.12)**, a draft preliminary view, was approved.

Agenda Item 1.6.2: to consider possible additional primary allocations to the fixed-satellite service (FSS) (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 this range, taking into account the results of ITU-R studies, in accordance with Resolution **152 (WRC-12)** – Document **WAC/013(01.10.12)**, a draft preliminary view, was approved.

Agenda Item 1.10: to consider spectrum requirements and possible additional spectrum allocations for the mobile-satellite service in the Earth-to-space and space-to-Earth directions, including the satellite component for broadband applications, including International Mobile Telecommunications (IMT), within the frequency range from 22 GHz to 26 GHz, in accordance with Resolution **234 (WRC-12)** – Document **WAC/014(01.10.12)**, a draft preliminary view, which edits NTIA's preliminary view, was approved.

Agenda Item 1.9.1: to consider possible new allocations to the fixed-satellite service in the

frequency bands 7 150-7 250 MHz (space-to-Earth) and 8 400-8 500 MHz (Earth-to-space), subject to appropriate sharing conditions, in accordance with Resolution **758 (WRC-12)** – Document **WAC/015(01.10.12)**, a draft preliminary view, an edit to the NTIA draft preliminary view in **Document WAC/008(01.10.12)**, was approved.

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)** – Document **WAC/016(01.10.12)**, a draft preliminary view, which edits the NTIA draft preliminary view in **Document WAC/006(01.10.12)**, was approved.

Mr. Wengryniuk reported that IWG-3 had also looked at the preliminary views for Agenda Items 1.9.2 and 1.11 as approved by NTIA and had no concerns with NTIA's preliminary views.

IWG-4 – Regulatory Issues

Mr. Baruch, Chair of IWG-4, presented the two preliminary views that had been approved by IWG-4.

Agenda Item 9.1.2: Size of the coordination arc for triggering coordination under RR No. 9.7 between geostationary-satellite networks in the 30/20 GHz FSS bands – Document **WAC/018(01.10.12)**, a draft preliminary view, was approved.

Agenda Item 9.1.5: consideration of technical and regulatory actions in order to support existing and future operation of fixed-satellite service earth stations within the band 3400-4200 MHz, as an aid to the safe operation of aircraft and reliable distribution of meteorological information in some countries in Region 1 – Document **WAC/019(01.10.12)**, a draft preliminary view, was discussed.

Mr. Entz, Sprint Nextel, indicated Sprint Nextel has concerns with the U.S. view point. He stated that while **Resolution 154** does reference that FSS is not a safety service, Sprint Nextel would like a determination that FSS is not safety service included in the U.S. viewpoint. He believes this would better complement Agenda Item 1.1 and its purposes and the U.S. National Broadband Plan. He also stated his concern that this draft preliminary review may not reflect the United States' previously stated viewpoint.

Mr. Gerdenitsch, Motorola Mobility, Inc., expressed similar concerns.

Mr. Jansky, Jansky-Barmat Telecommunications, Inc., on behalf of SES, commented that there was a lot of discussion on this issue at WRC-12 and that it is relevant to the U.S. He

further pointed out that the preliminary view does assert that FSS is a safety service so he does not understand the concerns expressed. He noted that the formulation of this preliminary view was extensively discussed in IWG-4. Mr. Jansky stated support for the draft preliminary view.

Mr. Arefi, Intel Corporation's alternate representative expressed that Intel Corporation has concerns with the preliminary view (Document **WAC/019(01.10.12)**). He emphasized that part of the band in question is an IMT band and Intel Corporation would like to have the opportunity for further discussions in IWG-4.

Ms. Kennedy, Nokia, Inc., stated that Nokia, Inc. supports the comments of other mobile companies because part of the band is identified for IMT. Nokia, Inc. feels more discussion on the document is needed.

Ms. Cornell reported on comments received from Ms. Sanders of Alcatel-Lucent and Ms. Alvarez of AT&T expressing similar concerns as those raised by other terrestrial-mobile entities at the meeting, specifically the transmission of aeronautical and meteorological information for flight operations may imply safety service status. Ms. Cornell indicated that Ms. Sanders and Ms. Alvarez requested that this recommendation be returned to IWG-4 for further consideration.

Mr. Baruch agreed that, in light of the concerns expressed, the draft preliminary view for Agenda Item 9.1.5 needs further consideration. Ms. Cornell thanked Mr. Baruch for giving the Committee the opportunity to discuss this preliminary view. Document **WAC/019(01.10.12)**, a draft preliminary view, was not approved by the Committee and was returned to IWG-4 for further consideration.

7. Future Meetings

Mr. Harris again congratulated all of the Committee members on the progress that has been made. He introduced Document **WAC/004(01.10.12)**, a timeline setting forth the dates of national, regional, and international preparatory meetings leading up to WRC-15 and announced the date for the next (third) meeting of the Committee as March 7, 2013. He reminded the participants that he and Ms. Cornell are available to respond to questions and assist in the work of the Committee.

The timeline document was noted.

8. Other Business

There being no other business, the meeting was adjourned.

Documents Distributed:

- WAC/004 WRC-15 Preparatory Timeline (rev. 01.10.12)
- WAC/005 Draft Minutes of First Meeting 09.08.12
- WAC/006 Letter, 15 August 2012, Draft Preliminary Views on Agenda Items 1.10, 1.11, 1.12 and 1.13
- WAC/007 Agenda for Second WRC-15 Advisory Committee Meeting
- WAC/008 Letter, 17 September 2012, Draft Preliminary Views on Agenda Items 1.3, 1.5, 1.6.1, 1.6.2, 1.9.1, 1.9.2, 1.14, 1.17, and 1.18.
- WAC/009 IWG-3 Draft Preliminary View on Agenda Item 1.5
- WAC/010 IWG-3 Draft Preliminary View on Agenda Item 1.7
- WAC/011 IWG-3 Draft Preliminary View on Agenda Item 1.8
- WAC/012 IWG-3 Draft Preliminary View on Agenda Item 1.6.1
- WAC/013 IWG-3 Draft Preliminary View on Agenda Item 1.6.2
- WAC/014 IWG-3 Draft Preliminary View on Agenda Item 1.10
- WAC/015 IWG-3 Draft Preliminary View on Agenda Item 1.9.1
- WAC/016 IWG-3 Draft Preliminary View on Agenda Item 1.12
- WAC/017 Report from the First Meeting of the APT Conference Preparatory Group for WRC-15 (APG15-1) (September 2012)
- WAC/018 IWG-4 Draft Preliminary View on Agenda Item 9.1.2
- WAC/019 IWG-4 Draft Preliminary View on Agenda Item 9.1.5
- WAC/020 IWG-2 Draft Preliminary View on Agenda Item 1.1 (bands bands1164-1215 MHz, 1215-1300 MHz, and 1559-1610 MHz)
- WAC/021 IWG-2 Draft Preliminary View on Agenda Item 1.1 (bands 470-698 MHz)
- WAC/022 IWG-2 Draft Preliminary View on Agenda Item 1.2
- WAC/023 IWG-2 Draft Preliminary View on Agenda Item 1.3
- WAC/024 IWG-2 Draft Preliminary View on Agenda Item 1.4
- WAC/025 IWG-1 Draft Preliminary View on Agenda Item 1.13
- WAC/026 IWG-1 Draft Preliminary View on Agenda Item 1.17
- WAC/027 IWG-1 Draft Preliminary View on Agenda Item 1.18

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Appendix 1
WRC-15 Advisory Committee Attendance
Second Meeting – October 1, 2012

Jose Albuquerque, Intelsat
Audrey L. Allison, The Boeing Company
Reza Arefi, Intel Corporation (alternate representative)
Stephen Baruch, Lerman Senter LLC
Christopher R. Bjornson, Steptoe & Johnson LLP
David Case, Cisco Systems
Diane J. Cornell, Inmarsat
Joseph Dockemeyer, Jr., Delphi
Kyle Entz, Sprint Nextel Corporation
Alexander Gerdenitsch, Motorola Mobility, Inc.
Scott Blake Harris, Neustar, Inc.
Kris Hutchison, Aviation Spectrum Resources, Inc.
Jeannette Kennedy, Nokia, Inc.
Damon C. Ladson, Wiltshire & Grannis LLP
Jennifer Warren, Lockheed Martin
Jack Wengryniuk, DirecTV

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Appendix 2

WRC-15 Advisory Committee – FCC Representatives and Observers Second Meeting – October 1, 2012

FCC Representatives:

Alexander Roytlat, FCC

Donna Christianson, FCC

Sankar Persaud, FCC

Allen Yang, FCC

Observers:

Darlene Drazenovich, NTIA

Pascale Dumit, ITT Exelis for Department of Defense

Donald Jansky, Jansky-Barmat Telecommunications, Inc.

Jonathan Siverling, ARRL

Thomas Tycz, Goldberg, Godles, Wiener & Wright

Joanne Wilson, ASRC for NASA

Julie Zoller, NTIA